Honeywell

Data Hiway, Box/Slot, and Data Point Form Instructions

HG12-500

Implementation
Hiway Gateway - 1

Data Hiway, Box/Slot, and Data Point Form Instructions

HG12-500
9/95

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About This Publication

This publication contains instructions for filling out the *Hiway Gateway Library Forms* in the *Implementation/Configuration Forms* binder. Specific instructions are provided on filling out the Hiway and box/slot forms (SW88-530 through SW88-539). General instructions are provided for filling out the process data point forms (HG88-501 through HG88-532) and specific instructions for filling out these forms are provided in the *Hiway Gateway Parameter Reference Dictionary* in the *Implementation/Hiway Gateway - 1* binder.

Before you use this publication, you should be familiar with the information in the *Configuration Data Collection Guide* in the *Implementation/Startup & Reconfiguration - 2* binder.

This publication supports TDC 3000^X software release 500.

Change bars are used to indicate paragraphs, tables, or illustrations containing changes that have been made by Document Change Notices or an update. Pages revised only to correct minor typographical errors contain no change bars.

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INTRODUCTION
Section 1

This manual provides instructions on how to fill out the *HG88-500* Data Hiway, Box/Slot, and Data Point forms. These forms are located in the *Implementation/Configuration* binder and correspond to displays that are called up under the Hiway Gateway selection on the TDC 3000^X Engineering Personality Menu.

1.1 GENERAL FORM INSTRUCTIONS

1.1.1 Line Numbers

The Hiway Gateway forms have been designed so that the lines on them correspond with those on the Parameter Entry Displays (PEDs) at the Universal Station. The Parameter Entry Displays will subsequently be used to enter the information from the form into the system. The lines on each form are consecutively numbered. In some cases, the line numbers may contain an alphabetic suffix letter. An alphabetic suffix indicates that the line may be exposed or suppressed on the PED, depending on the selection made in a previous line. This is explained further in sections that discuss each type of form.

1.1.2 Defaults

Default values are values that are assigned by the system. If you choose not to make an entry on a particular line, the default value is used. The default value for each parameter is listed on the configuration form, in the form instructions, and on the data-entry displays.

1.1.3 Pick and Port Notation

The forms have two types of entries:

1. Picks (also called touch-targets)—For selecting options. All options are on the forms. For each such entry, circle one of the options.

2. Ports—For entering data. The form shows the maximum number of characters that you can enter and the set of valid characters; write in an alphanumeric character-string.

1.2 REFERENCES

The following publications contain useful information that you may need when filling out the forms—

Title	Publication No.	Binder
Basic Controller, Algorithms Engineering Data	CB-09-01	Basic Controller Product Manual/25-001
Configuration Data Collection Guide	SW12-500	Implementation/Startup & Reconfiguration - 2
Data Entity Builder manual	SW11-511	Implementation/Engineering Operations - 1
Engineer's Reference Manual *	SW09-505	Implementation/Startup & Reconfiguration - 2
Extended Controller, Algorithms Engineering Data	CB-10-09	Extended Controller Product Manual/25-023
Hiway, Box Slot, and Data Point Forms	HG88-500	Implementation/Configuration Forms
Hiway Gateway Control Functions	HG09-501	Implementation/Hiway Gateway - 1
Hiway Gateway Parameter Reference Dictionary	HG09-540	Implementation/Hiway Gateway - 1
Multifunction Controller, Algorithms Engineering Data	BC-10-01	Multifunction Controller Product Manual/25-027
Network Forms Instructions	SW12-505	Implementation/Startup & Reconfiguration - 1
System Control Functions	SW09-501	Implementation/Startup & Reconfiguration - 2

* Section 8 of the *Engineer's Reference Manual* provides configuration guidelines that supplement the Hiway and Box/Slot form instructions that appear in Part 2 of this manual.

1.3 CONFIGURATION LIMITS/RESTRICTIONS

The configuration limits/restrictions for each Hiway Gateway in the system are listed in Table 1-1.

Table 1-1 — Hiway Gateway Configuration Limits/Restrictions

LIMIT/RESTRICTION PER HG	AFFECTED PARAMETER
Point Assignment:	
3000 total data points	
3000 analog inputs (includes analog composites and regulatories	
500 CB RVs	
100 HLPIU control counters	
Input and output portion of a composite data point must reside in the same box.	BOXNUM, OUTBOXNM
PV Configuration:	
Calibration offset can be used for 250 analog inputs (including analog composites, regulatories, and CB RVs)	CALIBOFF
Alarming:	
50 data points with emergency alarm priority	ALPRIOR
100 CB RV data points can be configured for alarming	ALFMT
500 contact-cutout secondary data points	CCRANK
600 data points can have event-initiated processing	EIPPCODE
Operating Configuration:	
500 digital data points whose output action is momentary (doorbell)	OUTIND, MOOUTIND

HIWAY AND BOX/SLOT FORM INSTRUCTIONS
Section 2

2.1 DATA HIWAY AND BOX SLOT CONFIGURATION

In general, Data Hiway and Box/Slot configuration provides two functions:

1. It establishes a basis for communication between LCN Nodes (such as a Universal Station) and Data Hiway boxes (such as BASIC Controllers) through Hiway Gateways, which are both LCN Nodes and Data Hiway boxes. This basis for communications depends on

   - assignment of Hiway Numbers to HG nodes on an LCN,
   - assignment of Data Hiway addresses to each box (including HGs) on each physical Data Hiway, and
   - assignment of each box on each physical Data Hiway to each HG on that physical Data Hiway, according to the function of the HG in relation to the box.

   These assignments and the relationships between them are described under the following three headings and are illustrated in Figure 2-1.

2. It establishes part of the data base that is required to define the functioning of each box on each Data Hiway. Related information that provides details for configuring box data bases is given in the Hiway Gateway Configuration publications.

2.1.1 Data Hiway Number Assignment

Data Hiway numbers are assigned to Data Hiways by associating them with pairs of Hiway Gateways during LCN Node configuration. Up-to-20 Data Hiways can be configured to each LCN by assigning Hiway Numbers that are unique on that LCN.

Data Hiway number assignment is a part of Network configuration. Because modification of the Network Configuration file requires system shutdown/startup of all LCN nodes, Hiway Number assignment should be carefully planned.

A single physical Data Hiway, which has all the physical characteristics and requirements normally associated with Data Hiways, can be treated as two or more functionally separate Data Hiways. As shown in Figure 2-1, a single physical Data Hiway can interface to an LCN through two or more HGs, each of which has a Hiway Number unique on that LCN, Also, a single physical Data Hiway can interface to two or more LCNs. In this case, the Hiway Numbers assigned to the other LCN must be unique on that LCN, but need not be different from Hiway Numbers assigned to different LCNs. (For example, Hiway NN on LCN B in Figure 2-1 may also be assigned Hiway Number 01, which is assigned to LCN A.) The functionally separate Data Hiways are shown in Figure 2-1 by dashed lines that indicate the boundaries of each functional Data Hiway. The method of assigning boxes to each functional Data Hiway is described under heading 2.1.3.

2.1.2 Data Hiway Address Assignment (Box Number Assignment)

Each box (including HGs) on a physical Data Hiway is assigned a unique address (Box Number). An HG pair requires two consecutive Box Numbers, which are always even/odd for primary/redundant HGs. In addition, certain types of process boxes require special assignment within the box number range. The following is a summary of these restricted address assignments:

HLPIU, LLPIU, LEPIU, DHP	5 to 31 (2nd address = 1st plus 32)
MC or A-MC	5 to 31 (2nd address = 1st plus 32)
EC, CB	5 to 63
HG (recommended)	2/3 (first pair), 32/33 (2nd) 34/35 (3rd)
H4500 with HIM	1
OP STNs, GPCIs, or PCSIs	4 (all)
620 HIM	5 to 31 (2nd address = 1st plus 32).

A single 620 HIM can have 2, 4, 6, or 8 box numbers, depending on the number of slots to be configured, as follows:

Box Numbers Required (Total)	*Number of Slots*
2	30
4	60
6	90
8	120

Each set of 2 box numbers (initial box number N, and N+32) can contain 30 slots, as shown in the above listing. The initial box number N (1st address), has a range of 5 to 31. When using more than 2 box numbers for a 620 HIM, the initial (1st address) box numbers must be consecutive starting with N, and the higher-order box numbers (2nd address) must be consecutive starting with N+32. As an example, assume that there are 8 box numbers to be configured and that the four lower-order box numbers starting with N are: N, N+1, N+2, and N+3. The four consecutive higher-order box numbers are then automatically assigned when the user enters Extended for the DHP Box Size (BOXSIZE) parameter.

No duplicate addresses are allowed on the Data Hiway, except for Operator Stations, General Purpose Computer Interfaces (GPCIs) and Personal Computer Serial Interfaces (PCSIs).

2.1.3 HG/Box Assignments

Each box (including HGs) on a physical Data Hiway must be configured to let other boxes know of its existence and also to let them know of its assigned function. The HG/Box assignments are relative; that is, they define the operational capabilities of each box relative to each functional Data Hiway. There are four types of HG/Box assignments:

1. ThisHG — This assignment means that an HG allows normal AM communications and other typical HG/process box functions for a box, such as:
   - building a process data base in the box
   - Time-Out Gate processing (AM control)
   - data-access operations (reads/writes between boxes and the LCN)
   - checkpointing and loading the box data base
   - change detection (and setting) - (configurable)
   - event processing (communication of state changes and alarms) - (configurable)
   - complete Hiway Security operation

2. AddedHG This assignment blocks communications between nodes on an LCN and the box being configured, allowing only

   – Hiway Security checking through the addressing diagnostics

3. RemoteHG This assignment enables limited communications between nodes on an LCN and the box being configured, allowing

   – the same as ThisHG except no AM control

4. H4500 This assignment enables limited communications between nodes on an LCN and the box being configured, allowing

   – the same as ThisHG except no AM control

When a physical Data Hiway includes more than one HG pair (and therefore, more than one Hiway Number Assignment), each box on the physical Data Hiway must be separately configured, once for each HG pair on that physical Data Hiway. For example, all thirteen boxes shown in Figure 2-1 must be separately configured for Hiway 01, for Hiway 02, and for Hiway NN.

The HG/Box assignments are relative in that, depending on its function, a given box can at the same time be assigned as ThisHG, and AddedHG, and RemoteHG. For example, Box 02 in Figure 2-1 is ThisHG on Hiway 01, but is an AddedHG to Hiway 02. Similarly, Box 06 is ThisHG on Hiway 02, but is AddedHG relative to Hiway 01. The Box-assignment designations between the dashed lines that show Hiway boundaries in Figure 2-1 and the accompanying arrows indicate the relationship of each box in each hiway to all other boxes in all other hiways on the same Physical Data Hiway. Figures 2-2 and 2-3 include lists that detail the configuration requirements necessary to define each box shown in Figure 2-1 in terms of Hiway Number, Box Number, Box Type, and Box Assignment.

NOTE

If Uninterrupted Automatic Control (UAC) is included, it must be configured entirely on the same functional Data Hiway; that is, the Reserve Controller Director and all controllers (Basic Controllers, Extended Controllers, or Multifunction Controllers, both primary and reserve) must be assigned on ThisHG to the same Hiway Gateway.

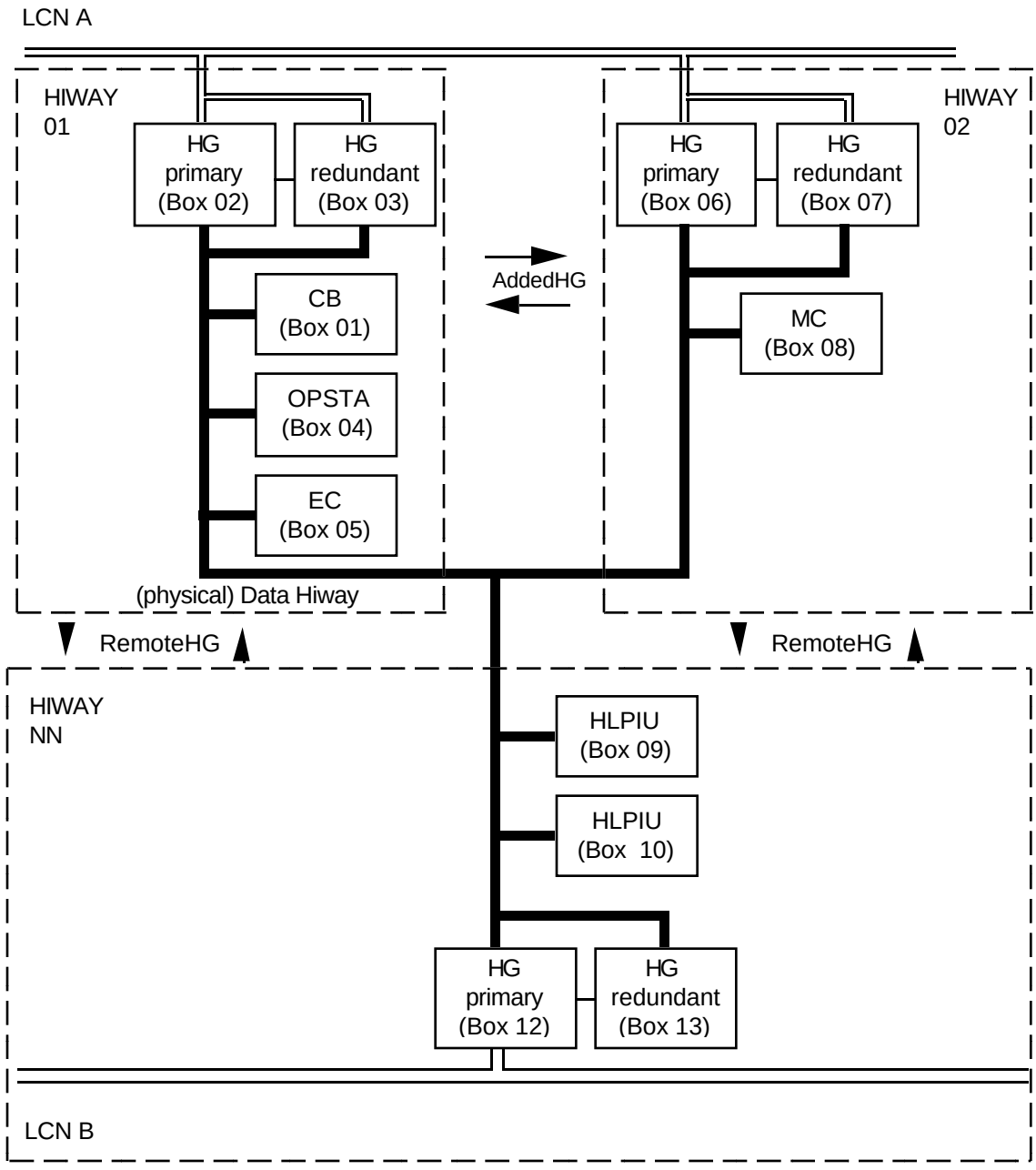

Figure 2-1 — Example of Data Hiway Physical/Functional Configuration 1947

A. LCN A

Form R500 SW88-530

Hiway Number	01
HTD Assignment	ThisHG
Hiway Number	02
HTD Assignment	AddedHG

Forms SW88-531 through SW88-530

Hiway Number	01	01	01	01	01
Box Number	01	02	03	04	05
Box Type	CB	HG	HG	OPSTA	EC
Box Assignment	ThisHG	ThisHG	ThisHG		ThisHG
Hiway Number	01	01	01		
Box Number	06	07	08		
Box Type	HG	HG	MC		
Box Assignment	AddedHG	AddedHG	AddedHG		
Hiway Number	01	01	01	01	
Box Number	09	10	12	13	
Box Type	HLPIU	LLPIU	HG	HG	
Box Assignment	RemoteHG	RemoteHG	RemoteHG	RemoteHG	
Hiway Number	02	02	02	02	02
Box Number	01	02	03	04	05
Box Type	CB	HG	HG	OPSTA	EC
Box Assignment	AddedHG	AddedHG	AddedHG		AddedHG
Hiway Number	02	02	02		
Box Number	06	07	08		
Box Type	HG	HG	MC		
Box Assignment	ThisHG	ThisHG	ThisHG		
Hiway Number	02	02	02	02	
Box Number	09	10	12	13	
Box Type	HLPIU	LLPIU	HG	HG	
Box Assignment	RemoteHG	RemoteHG	RemoteHG	RemoteHG	

Figure 2-2 — Example of Data Hiway Physical/Functional Configuration 1948

B. LCN B

Form R500 SW88-530

Hiway Number	nn
HTD Assignment	ThisHG

Forms SW88-531 through SW88-530

Hiway Number	nn	nn	nn	nn	nn
Box Number	01	02	03	04	05
Box Type	CB	HG	HG	OPSTA	EC
Box Assignment	RemoteHG	RemoteHG	RemoteHG		RemoteHG

Hiway Number	nn	nn	nn
Box Number	06	07	08
Box Type	HG	HG	MC
Box Assignment	RemoteHG	RemoteHG	RemoteHG

Hiway Number	nn	nn	nn	nn
Box Number	09	10	11	12
Box Type	HLPIU	LLPIU	HG	HG
Box Assignment	ThisHG	ThisHG	ThisHG	ThisHG

Figure 2-3 — Example of Data Hiway Physical/Functional Configuration 1949

2.1.4 Filling In Hiway/Box Slot Forms

The instructions for filling in the forms are in tabular format. Each line on the form has a number that corresponds to a number in the table for that form, where the choices and instructions are given.

Some of the entries require additional entries. The relationship between the line(s) that require additional entries and the line(s) on which the additional entries are made is indicated in one of two ways:

- by alphabetic suffixes, when the selectively disclosed parameters appear on the displays immediately after the parameter that requires more entries. For example, Lines 8A, 8B, and 8C depend on the entries made in line 8.

- by asterisks, two (**) for the parameters that require additional entries and three (***) for the selectively disclosed parameters. For example, Lines 42A-42F (***) depend on the entries made in lines 8 (**) and 9 (**).

The forms have two other types of entries:

- Options—Sometimes you must select an option. All options are on the forms. For each such entry, circle one of the options.

- Data—sometimes the form provides a series of blank spaces where can enter numbers or a characters. The form or form instructions tell what characters are valid and the maximum number characters that can be entered. Write in an alphanumeric character-string.

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HIWAY CONFIGURATION FORM

HG-HIWAY POINT ASSIGNMENT DISPLAY PAGE 1

1 HIWAY NUMBER └__┘__┘ (Default = 01)
(HWYNUM)

2 HTD ASSIGNMENT THISHG REMOTEHG HTD ADDEDHG
(HWYHTD) (Default = HTD)

2A SWITCH INTERVAL (MIN) └__┘__┘__┘__┘ (Default = 1440)
(HWYSWINT)

2B SWITCH BASE TIME (MIN └__┘__┘__┘__┘ (Default = 0)
(HWYSWBAS)

3 SOE SYNCHRONIZATION DISABLE ENABLE (Default = DISABLE)
(SOESYNCH)

4 COMMAND DISAGREE TEXT └__┘__┘__┘__┘__┘__┘__┘__┘ (Default = CMD_DIS)
(CDTEXT)

DUAL DIGITAL INPUT NONCOMPLEMENTARY TEXT

5 TEXT1 └__┘__┘__┘__┘__┘__┘__┘__┘ (Default = BADPV)
(NCMPTXT1)

6 TEXT2 └__┘__┘__┘__┘__┘__┘__┘__┘ (Default = INBETWN)
(NCMPTXT2)

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.1 Data Hiway Configuration Form *SW88-530*

Table 2-1 contains instructions for Configuration Form *SW88-530*.

Table 2-1 — Instructions for Data Hiway HG-Hiway Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG-HIWAY POINT ASSIGNMENT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN-node configuration.*
2	HTD ASSIGNMENT (HWYHTD)	Circle one: THISHG REMOTEHG HTD ADDEDHG (Default = HTD)	Defines which device performs the functions of a Hiway Traffic Director. ThisHG = the HG assigned to this Hiway Number* acts as HTD on the physical Data Hiway. RemoteHG = The HG on another LCN acts as HTD. Added HG = HG on this LCN, but assigned to a different Hiway Number acts as HTD If THISHG is entered, also make entries in Lines 2A and 2B, then go to Line 3. If REMOTEHG or ADDEDHG is entered, go to Line 3.
2A	SWITCH INTERVAL (MIN) (HWYSWINT)	Enter a number from 1 to 1440 (Default = 1440)	Defines the amount of time (in minutes) between automatic switching of the primary and backup Data Hiways; 1440 minutes = number of minutes in one day.
2B	SWITCH BASE TIME (MIN) (HWYSWBAS)	Enter the time of day (in minutes) that automatic hiway switching is to take place (Default = 0)	Example: 1:30 A.M. would be entered as 90. Example: 3:00 P.M. would be entered as 900.

(Continued)

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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HIWAY CONFIGURATION FORM

HG-HIWAY POINT ASSIGNMENT DISPLAY PAGE 1

1 HIWAY NUMBER └__┘__┘ (Default = 01)
(HWYNUM)

2 HTD ASSIGNMENT THISHG REMOTEHG HTD ADDEDHG
(HWYHTD) (Default = HTD)

2A SWITCH INTERVAL (MIN) └__┘__┘__┘__┘ (Default = 1440)
(HWYSWINT)

2B SWITCH BASE TIME (MIN └__┘__┘__┘__┘ (Default = 0)
(HWYSWBAS)

3 SOE SYNCHRONIZATION DISABLE ENABLE (Default = DISABLE)
(SOESYNCH)

4 COMMAND DISAGREE TEXT └__┘__┘__┘__┘__┘__┘__┘__┘ (Default = CMD_DIS)
(CDTEXT)

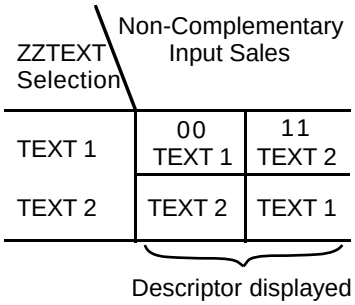
DUAL DIGITAL INPUT NONCOMPLEMENTARY TEXT

5 TEXT1 └__┘__┘__┘__┘__┘__┘__┘__┘ (Default = BADPV)
(NCMPTXT1)

6 TEXT2 └__┘__┘__┘__┘__┘__┘__┘__┘ (Default = INBETWN)
(NCMPTXT2)

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-1 — Instructions for Data Hiway HG-Hiway Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		ASSIGNMENT DISPLAY	
3	SOE SYNCHRONIZATION (SOESYNCH)	Circle one: DISABLE ENABLE (Default = DISABLE)	Select ENABLE if the HG being configured is to generate SOE (Sequence of Events) words for HLPIUs on this hiway. If an H4500 is on this Hiway, it must generate SOE words
4	COMMAND DISAGREE TEXT (CDTEXT)	If this Data Hiway includes Multifunction Controllers, enter up-to-8 characters A–Z, 0–9, and| space ! " % & '( ) * + - / : ; > < = ? , . $ (Default = CMD DIS)	This descriptor is displayed if an MC has been configured for Command Disagree and if both inputs of a dual digital data point are in the same state.
5	TEXT 1 (NCMPTXT1)	Enter a descriptor of up-to-8 characters A–Z, 0–9, and space ! " % & ' ( ) * + - / : ; > < = ? , . $ (Default = BADPV)	This descriptor is displayed when TEXT 1 is selected for ZZTEXT during configuration of a point in a box assigned to the same HG and both inputs to a dual digital point are zero (00). If both inputs are ones (11), the TEXT 2 descriptor is displayed.
6	TEXT 2 (NCMPTXT2)	Enter a descriptor of up-to-8 characters A–Z, 0–9, and space ! " % & ' ( ) * + - / : ; > < = ? , . $ (Default = INBETWN)	This descriptor is displayed when TEXT 2 is selected for ZZTEXT during configuration of a point in a box assigned to the same HG and both inputs to a dual digital point are zero (00). If both inputs are ones (11), the TEXT 1 descriptor is displayed. Selection of Text Descriptors (ZZTEXT selection, part of point configuration) 

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HG BOX DATA POINT CONFIGURATION FORM

```
HG BOX POINT DISPLA

1   HIWAY NUMBER              |__|__|   (Default = 1
      (HWYNUM
2   BOX NUMBER                |__|__|   (Default = 0
      (BOXNUM
3   BOX TYPE                  CB         AU         HLPIU      L

      (BOXTYPE)               LEPIU      CBRCD      EC         E
                              MC         MCRCD      DHP        C
                              H4500      HG         GPCI       NOTCONFG (Ente
4   BOX ASSIGNMENT            THISHG     REMOTEHG   ADDEDHG (Default = TH
      (BOXASSN

5   EVENT PROCESSING          DISABLE   (DEFAULT = DISABLE ONLY FOR THIS BOX
      (EVENTPRC)
```

```
1   HIWAY NUMBER              |__|__|   (Default = 1
      (HWYNUM
2   BOX NUMBER                |__|__|   (Default = 0
      (BOXNUM
3   BOX TYPE                  CB         AU         HLPIU      L
      (BOXTYPE)               LEPIU      CBRCD      EC         E
                              MC         MCRCD      DHP        C
                              H4500      HG         GPCI       NOTCONFG (Ente
4   BOX ASSIGNMENT            THISHG     REMOTEHG   ADDEDHG (Default = TH
      (BOXASSN

5   EVENT PROCESSING          DISABLE   (DEFAULT = DISABLE ONLY FOR THIS BOX
      (EVENTPRC)
```

```
1   HIWAY NUMBER              |__|__|   (Default = 1
      (HWYNUM
2   BOX NUMBER                |__|__|   (Default = 0
      (BOXNUM
3   BOX TYPE                  CB         AU         HLPIU      L
      (BOXTYPE)               LEPIU      CBRCD      EC         E
                              MC         MCRCD      DHP        C
                              H4500      HG         GPCI       NOTCONFG (Ente
4   BOX ASSIGNMENT            THISHG     REMOTEHG   ADDEDHG (Default = TH
      (BOXASSN

5   EVENT PROCESSING          DISABLE   (DEFAULT = DISABLE ONLY FOR THIS BOX
      (EVENTPRC)
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.2 HG Box Data Point (Box/Slot) Configuration Form *SW88-531*

Table 2-2 contains instructions for Configuration Form *SW88-531*.

Table 2-2 — Instructions for HG Box Data Point Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG BOX POINT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN node configuration*.
2	BOX NUMBER (BOXNUM)	Enter a box number from 1 to 63. Box number 4 is generally reserved for the Operator Station if an Operator Station is on this hiway (Default = 0)	Defines the box address of the HG on the selected Data Hiway. If there is no operator station on this hiway, box number 4 can be assigned to the HG.
3	BOX TYPE (BOXTYPE)	Enter HG	Defines this box as an HG.
4	BOX ASSIGNMENT (BOXASSN)	Circle one: THISHG REMOTEHG ADDEDHG (Default = THISHG)	Defines the function of the HG being configured relative to this Data Hiway (see heading 2.1.3). –ThisHG = The HG being configured is assigned to the Hiway Number entered on Line 1. –RemoteHG = The HG being configured is assigned to a Hiway Number on a different LCN. –Added HG = The HG being configured is assigned to a Hiway Number different from that entered on line 1.
5	EVENT PROCESSING (EVENTPRC)	Default = Disable	Defines whether process events that pertain to this parameter hiway box are to be routed through the HG to the LCN Disable = Process events are not routed through the HG to the LCN.

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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CB BOX DATA POINT CONFIGURATION FORM

HG CB BOX POINT DISPLA

1	HIWAY NUMBER	⌊__⌋⌊__⌋	(Default = 1		
	(HWYNUM				
2	BOX NUMBER	⌊__⌋⌊__⌋	(Default = 0		
	(BOXNUM				
3	BOX TYPE	CB	AU	HLPIU	L
	(BOXTYPE)	LEPIU	CBRCD	EC	E
		MC	MCRCD	DHP	C
		H4500	HG	GPCI	NOTCONFG (Ente
4	BOX ASSIGNMENT	THISHG	REMOTEHG	ADDEDHG	H4500 (Defa
**	(BOXASSN)				TH
5	LOAD DESTINATION	HG	HG HIWAY	(Default =	
**	(LOADDEST				
6	CHANGE DETECTION	NOTCONFG	DETECT	SET	(Default = NOTC
	(CHNGFLAG				
7	EVENT PROCESSING	DISABLE	ENABLE	(Default = DIS/	
	(EVENTPRC				
8	BOX TRENDING	NOTREND	TREND	(Default = NOTI	
	(BOXTREND				
9	TOG INTERVAL 1	⌊__⌋⌊__⌋⌊__⌋⌊__⌋	(Default = 0 seconds		
***	(BOXTOG1				
10	TOG INTERVAL 2	⌊__⌋⌊__⌋⌊__⌋⌊__⌋	(Default = 0 seconds		
***	(BOXTOG2				
10A	SLOT 1 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
	(TOGINTSL				
10B	SLOT 2 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
19C	SLOT 3 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10D	SLOT 4 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10E	SLOT 5 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10F	SLOT 6 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10G	SLOT 7 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10H	SLOT 8 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.3 CB Box Data Point (Box/Slot) Configuration Form *SW88-532*

Table 2-3 contains instructions for Configuration Form *SW88-532*.

Table 2-3 — Instructions for CB Box Data Point Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG CB BOX POINT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN node configuration.
2	BOX NUMBER (BOXNUM)	Enter a number from 1 to 63 (Default = 0)	Defines the hiway address of this CB box on the Data Hiway.
3	BOX TYPE (BOXTYPE)	Enter CB	
4 **	BOX ASSIGNMENT (BOXASSN)	Circle one: THISHG REMOTEHG ADDEDHG H4500 (Default = THISHG)	Defines the function relative to this CB of <u>each</u> HG on the same physical Data Hiway. Refer to Table 2-2 and to heading 2.1.3. if AddedHG is entered, configuration is complete.
5 **	LOAD DESTINATION (LOADDEST)	Circle one: HG HG_HIWAY (Default = HG)	If ThisHG was entered on line 4 and HG_HIWAY is entered on line 5, fill in the rest of this form, including lines 9 through 10H, as applicable. If HG is entered on line 5, fill in only lines 6 through 8.
6	CHANGE DETECTION (CHNGFLAG)	Circle one: NOTCONFG DETECT SET (Default = NOTCONFG)	Select: –NOTCONFG if no preferred devices are on this Data Hiway (Speeds up communication.) –DETECT to enable HG to alert LCN devices such as other HGs or H4500s to changes in CB status that originated in preferred devices on the same Data Hiway.

(Continued)

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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CB BOX DATA POINT CONFIGURATION FORM

HG CB BOX POINT DISPLA

1	HIWAY NUMBER	⌊__|__⌋	(Default = 1		
	(HWYNUM				
2	BOX NUMBER	⌊__|__⌋	(Default = 0		
	(BOXNUM				
3	BOX TYPE	CB	AU	HLPIU	L
	(BOXTYPE)	LEPIU	CBRCD	EC	E
		MC	MCRCD	DHP	C
		H4500	HG	GPCI	NOTCONFG (Ente
4	BOX ASSIGNMENT	THISHG	REMOTEHG	ADDEDHG	H4500 (Defa
**	(BOXASSN)				TH
5	LOAD DESTINATION	HG	HG HIWAY	(Default =	
**	(LOADDEST				
6	CHANGE DETECTION	NOTCONFG	DETECT	SET	(Default = NOTC
	(CHNGFLAG				
7	EVENT PROCESSING	DISABLE	ENABLE	(Default = DIS/	
	(EVENTPRC				
8	BOX TRENDING	NOTREND	TREND	(Default = NOTI	
	(BOXTREND				
9	TOG INTERVAL 1	⌊__|__|__|__⌋	(Default = 0 seconds		
***	(BOXTOG1				
10	TOG INTERVAL 2	⌊__|__|__|__⌋	(Default = 0 seconds		
***	(BOXTOG2				
10A	SLOT 1 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
	(TOGINTSL				
10B	SLOT 2 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
19C	SLOT 3 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10D	SLOT 4 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10E	SLOT 5 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10F	SLOT 6 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10G	SLOT 7 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	
10H	SLOT 8 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI	

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-3 — Instructions for CB Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG CB BOX POINT DISPLAY	
7	EVENT PROCESSING (EVENTPRC)	Circle one: DISABLE ENABLE (Default = DISABLE)	Select ENABLE if process alarms, process changes, and operator messages are to be routed through this HG to the LCN.
8	BOX TRENDING (BOXTREND)	Circle one: NOTREND TREND (Default = NOTREND)	Defines whether this box has the trend option.
9 ***	TOG INTERVAL 1 (BOXTOG1)	Enter 0 to 9999 seconds 0 = Never shed (Default = 0 seconds)	TOG (Time-Out Gate) intervals are user-specified, selectable maximum times between successive transmissions from a supervisory controller to a particular slot in a box. If the selected interval is exceeded, the slot sheds from its remote cascade mode. If both entries are zero, no selection is provided; skip lines 10A through 10H.
10 ***	TOG INTERVAL 2 (BOXTOG2)		
10A – 10H	SLOT 1–8 TOG INTERVAL (TOGINTSL)	Circle one: INTERV1 INTERV2 (Default = INTERV1)	Specifies whether TOG INTERVAL 1 (INTERV1) or TOG INTERVAL 2 (INTERV2) entered on Lines 9 and 10 is to be the time-out gate interval for the particular slot.

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DHP/620-HIM BOX DATA POINT CONFIGURATION FORM

```
HG DHP BOX POINT DISPLA

1   HIWAY NUMBER          |__|__|      (Default = 1
      (HWYNUM
2   BOX NUMBER            |__|__|      (Default = 0
      (BOXNUM
3   BOX TYPE                 CB        AU        HLPIU     L
      (BOXTYPE)              LEPIU     CBRCD     EC        E
                             MC        MCRCD     DHP       C
                             H4500     HG        GPCI      NOTCONFG (Ente
                             (Default = THIS

4   BOX ASSIGNMENT           THISHG    REMOTEHG  ADDEDHG (Default = TH
**    (BOXASSN)              H45
5   LOAD DESTINATION         HG        HG HIWAY  (Default =
**    (LOADDEST
6   DHP BOX SIZE             REGULAR   EXTENDED (Default = REGL
      (BOXSIZE
7   BOX PROTOCOL             ALLENBRD  MODICON   HONYWELL (Default = ALLE
      (BOXPROT
8   BOX STARTUP              COLD      HOT (Default = C
      (BOXSTART
9   SCAN TIME(SEC)        |__|__|      (Default = 0
      (SCANTIME
10  PC1 MODEL TYPE           NOTCONFG  M384      M484      M584  (For Mod
      (PC1TYPE)              (Default = NOTCONFG)----------
                             NOTCONFG  APLC      APLC2     APL
                             APLC220   APLC230   AMINPLC2  (For Allen Bra
                             (Default = NOTCONFG)---------
                             NOTCONFG  IPC620 (For Honeyw
                             (Default = NOTCONFG)----------
10A PORT NUMBER           |__|       (Default = 1
      (PC1PORT
10B PORT ADDRESS          |__|__|__|     (Default = 0
      (PC1PORTA
10C KEEP ALIVE ADDRESS    |__|__|__|__|     (Default = 0
      (PC1ALIVE
10D KEEP ALIVE BIT POSITIO|__|__|     (Default = 0
      (PC1ALVBT
10E SPECIFIER             |__|     (Default = 0
      (PC1ALVSP
11  PC2 MODEL TYPE           NOTCONFG  M384      M484      M584  (For Mod
      (PC2TYPE)              ------------------------------
                             NOTCONFG  APLC      APLC2     APL
                             APLC220   APLC230   AMINPLC2  (For Allen Bra
                             ------------------------------
                             NOTCONFG  IPC620  (For Honeyw
                             ------------------------------
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.4 DHP/620-HIM Box Data Point (Box/Slot) Configuration Form *SW88-533*

Table 2-4 contains instructions for Configuration Form *SW88-533*.

Table 2-4 — Instructions for DHP/620-HIM Box Data Point Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG DHP BOX POINT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN node configuration.*
2	BOX NUMBER (BOXNUM)	Enter a number from 1 to 53 (box number 4 is reserved for the Operator Station) (Default = 0)	Defines the box address of this DHP (or 620 HIM) box on the selected Data Hiway. A single 620 HIM contains 30-120 slots depending on whether 2, 4, 6, or 8 box numbers are used. The user must fill out a separate *SW88-533* configuration form for each of the four lower-order (1st address) numbers. Refer to IPCD Publication *620-8981, 620-0081 Hiway Interface Module User Manual* for the location of the 620 HIM Base Address (1st address) and Block Enable (number of boxes) settings.
3	BOX TYPE (BOXTYPE)	Enter DHP	Defines this box as being the Data Hiway Port (DHP).
4 **	BOX ASSIGNMENT (BOXASSN)	Circle one: THISHG REMOTEHG ADDEDHG H4500 (Default = THISHG)	Defines the function relative to this DHP of each HG on the same physical Data Hiway. (Refer to heading 2.1.3.) If Added HG is entered, configuration is complete.
5 **	LOAD DESTINATION (LOADDEST)	Circle one: HG HG_HIWAY (Default = HG)	If This HG was entered on line 4, and HG_HIWAY is entered on line 5, fill in the rest of this form, including lines 50–51AO, as applicable. Other wise, fill in the rest of this form except for lines 50–51AO.

(Continued)

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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DHP/620-HIM BOX DATA POINT CONFIGURATION FORM

```
HG DHP BOX POINT DISPLA

1   HIWAY NUMBER          |__|__|      (Default = 1
      (HWYNUM
2   BOX NUMBER            |__|__|      (Default = 0
      (BOXNUM
3   BOX TYPE                 CB        AU        HLPIU     L
      (BOXTYPE)              LEPIU     CBRCD     EC        E
                             MC        MCRCD     DHP       C
                             H4500     HG        GPCI      NOTCONFG (Ente
                             (Default = THIS

4   BOX ASSIGNMENT           THISHG    REMOTEHG  ADDEDHG (Default = TH
**    (BOXASSN)              H45
5   LOAD DESTINATION         HG        HG HIWAY  (Default =
**    (LOADDEST
6   DHP BOX SIZE             REGULAR   EXTENDED (Default = REGL
      (BOXSIZE
7   BOX PROTOCOL             ALLENBRD  MODICON   HONYWELL (Default = ALLE
      (BOXPROT
8   BOX STARTUP              COLD      HOT (Default = C
      (BOXSTART
9   SCAN TIME(SEC)        |__|__|      (Default = 0
      (SCANTIME
10  PC1 MODEL TYPE           NOTCONFG  M384      M484      M584  (For Mod
      (PC1TYPE)              (Default = NOTCONFG)----------
                             NOTCONFG  APLC      APLC2     APL
                             APLC220   APLC230   AMINPLC2  (For Allen Bra
                             (Default = NOTCONFG)---------
                             NOTCONFG  IPC620 (For Honeyw
                             (Default = NOTCONFG)----------
10A PORT NUMBER           |__|       (Default = 1
      (PC1PORT
10B PORT ADDRESS          |__|__|__|     (Default = 0
      (PC1PORTA
10C KEEP ALIVE ADDRESS    |__|__|__|__|     (Default = 0
      (PC1ALIVE
10D KEEP ALIVE BIT POSITIO|__|__|     (Default = 0
      (PC1ALVBT
10E SPECIFIER             |__|     (Default = 0
      (PC1ALVSP
11  PC2 MODEL TYPE           NOTCONFG  M384      M484      M584  (For Mod
      (PC2TYPE)              ------------------------------
                             NOTCONFG  APLC      APLC2     APL
                             APLC220   APLC230   AMINPLC2  (For Allen Bra
                             ------------------------------
                             NOTCONFG  IPC620  (For Honeyw
                             ------------------------------
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-4 — Instructions for DHP/620-HIM Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG DHP BOX POINT DISPLAY	
6	DHP BOX SIZE (BOXSIZE)	Circle one: REGULAR EXTENDED (Default = REGULAR)	Defines whether DHP has 15 slots (REGULAR) or 30 slots (EXTENDED). For a 620 HIM, enter Extended. Slot 16 is reserved for DHP/PC configuration and box status. Slot 32 is reserved for future use. A single 620 HIM has a possible total of 120 slots; 30 slots for each set of box numbers (N and N+32).

(Continued)

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DHP/620-HIM BOX DATA POINT CONFIGURATION FORM
(Continued)

HG DHP BOX POINT DISPLA

```
11A PORT NUMBER       └─┘          (Default = 1
      (PC2PORT
11B PORT ADDRESS      └─┴─┴─┘           (Default = 0
      (PC2PORTA
11C KEEP ALIVE ADDRESS└─┴─┴─┴─┘            (Default = 0
      (PC2ALIVE
11D KEEP ALIVE BIT POS└─┴─┘             (Default = 0
      (PC2ALVBT
11E SPECIFIER         └─┘          (Default = 0
      (PC2ALVSP
12  PC3 MODEL TYPE            NOTCONFG  M384      M484      M584  (For Moc
      (PC3TYPE)               ------------------------------
                              NOTCONFG  APLC      APLC2     APl
                              APLC220   APLC230   AMINPLC2  (For Allen Bra
                              ------------------------------

                              NOTCONFG  IPC620  (For Honeyw
                              ------------------------------
12A PORT NUMBER       └─┘          (Default = 1
      (PC3PORT
12B PORT ADDRESS      └─┴─┴─┘           (Default = 0
      (PC3PORT
12C KEEP ALIVE ADDRESS└─┴─┴─┴─┘            (Default = 0
      (PC3ALIVE
12D KEEP ALIVE BIT POS└─┴─┘            (Default = 0
      (PC3ALVBT
12E SPECIFIER         └─┘          (Default = 0
      (PC3ALVSP
13  PC4 MODEL TYPE            NOTCONFG  M384      M484      M584  (For Moc
      (PC4TYPE)               ------------------------------
                              NOTCONFG  APLC      APLC2     APl
                              APLC220   APLC230   AMINPLC2  (For Allen Bra
                              ------------------------------
                              NOTCONFG  IPC620  (For Honeyw
                              ------------------------------
13A PORT NUMBER       └─┘          (Default = 1
      (PC4PORT
13B PORT ADDRESS      └─┴─┴─┘           (Default = 0
      (PC4PORTA
13C KEEP ALIVE ADDRESS└─┴─┴─┴─┘            (Default = 0
      (PC4ALIVE
13D KEEP ALIVE BIT POS└─┴─┘            (Default = 0
      (PC4ALVBT
13E SPECIFIER         └─┘          (Default = 0
      (PC4ALVSP
```

References Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-4 — Instructions for DHP/620 HIM Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG DHP BOX POINT DISPLAY	
7	BOX PROTOCOL (BOXPROT)	Circle one: ALLENBRD MODICON HONYWELL (Default = ALLENBRD)	Defines the type of protocol (message format) that is to be used by this DHP (or 620 HIM). For the 620 HIM, enter Honeywell. The entry on this line determines which PC models are available in Lines 10–17 (PC1–PC8 MODEL TYPE). Protocol for GE PCs is the same as that for Modicon.
8	BOX STARTUP (BOXSTART)	Circle one: HOT COLD (Default = COLD)	In a cold startup, the DHP (or 620 HIM) does not enter its normal operating state after startup and remains in a reset state. In a hot startup, the DHP (or 620 HIM) enters its normal processing state after startup, and processing is enabled.
9	SCAN TIME(SEC) (SCANTIME)	Enter 0 to 15 seconds. (Default = 0)	Assigns the scan time (in seconds) during which the DHP (or 620 HIM) updates all the PC data points in the DHP (or 620 HIM) database. A scan time of 0 seconds is considered as being free running. **NOTE** For a 620 HIM, make entries in Lines 10C and 10D; then go to Line 18.
10–17 (See NOTE)	PC1–PC8 MODEL TYPE (PC1TYPE) to (PC8TYPE)	If MODICON has been entered in Line 7, circle one: NOTCONFG M384 M484 M584 (Default = NOTCONFG)	Defines the PC model type for up to 8 PCs (PC1–PC8). M384 = Model Type 384 M484 = Model Type 484 M584 = Model Type 584

(Continued)

NOTE

In the following instructions, similar entries are grouped to avoid cumbersome repetition. The line numbers of instructions and form entries correspond to each other, but are not shown on facing pages.

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DHP/620-HIM BOX DATA POINT CONFIGURATION FORM
(Continued)

HG DHP BOX POINT DISPL

```
14  PC5 MODEL TYPE           NOTCONFG  M384      M484      M584  (For Mod
     (PC5TYPE)               ------------------------------
                             NOTCONFG  APLC      APLC2     APl
                             APLC220   APLC230   AMINPLC2  (For Allen Bra
                             ------------------------------
                             NOTCONFG  IPC620  (For Honeyw
                             ------------------------------
14A PORT NUMBER              └──┘     (Default = 1
      (PC5PORT
14B PORT ADDRESS             └──┴──┘     (Default = 0
      (PC5PORTA
14C KEEP ALIVE ADDRESS       └──┴──┴──┘     (Default = 0
      (PC5ALIVE
14D KEEP ALIVE BIT POSITION  └──┘     (Default = 0
      (PC5ALVBT
14E SPECIFIER                └──┘     (Default = 0
      (PC5ALVSP
15  PC6 MODEL TYPE           NOTCONFG  M384      M484      M584  (For Mod
      (PC6TYPE)              ------------------------------
                             NOTCONFG  APLC      APLC2     APl
                             APLC220   APLC230   AMINPLC2  (For Allen Bra

                             ------------------------------
                             NOTCONFG  IPC620  (For Honeyw
                             ------------------------------
15A PORT NUMBER              └──┘     (Default = 1
      (PC6PORT
15B PORT ADDRESS             └──┴──┘     (Default = 0
      (PC6PORTA
15C KEEP ALIVE ADDRESS       └──┴──┴──┘     (Default = 0
      (PC6ALIVE
15D KEEP ALIVE BIT POSITI    └──┘     (Dafault = 0
      (PC6ALVBT
15E SPECIFIER                └──┘     (Default = 0
      (PC6ALVSP
16  PC7 MODEL TYPE           NOTCONFG  M384      M484      M584  (For Mod
      (PC7TYPE)              ------------------------------
                             NOTCONFG  APLC      APLC2     APl
                             APLC220   APLC230   AMINPLC2  (For Allen Bra
                             ------------------------------
                             NOTCONFG  IPC620  (For Honeyw
                             ------------------------------
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-4 — Instructions for DHP/620 HIM Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG DHP BOX POINT DISPLAY	
			Select M584 if newer model MODICONs are to be configured. GE Model types correspond to Modicon types as follows: GE 6/60—M384 GE 6/600—M484 GE 6/6000—M584
		If ALLENBRD has been entered in Line 7, circle one: NOTCONFG APLC APLC2 APLC215 APLC220 APLC230 AMINPLC2 (Default = NOTCONFG)	NOTCONFG = Not configured APLC = Model Type PLC APLC2 = Model Type PLC2 APLC215 = Model Type PLC215 APLC220 = Model Type PLC220 APLC230 = Model Type PLC230 AMINPLC2 = Model Type Mini PLC2
		If HONYWELL has been entered in Line 7, circle one: NOTCONFG IPC620 (Default = NOTCONFG)	The DHP supports all Honeywell PC model types; the model type does not have to be specified further. If NOTCONFG is selected, information—including the Keep Alive Address—for the PC will not be displayed on the DHP box status display, and PCADDRxx and SPECIFxx parameters will not be read from the 620 HIM.
10A– 17A	PORT NUMBER (PC1PORT) to (PC8PORT)	Enter a number from 1 to 4 (Default = 1)	For a 620 HIM, use the default value. Defines the DHP port number for a PC. One DHP port can handle –up-to-8 Allen Bradley or Modicon PCs –one Honeywell PC

(Continued)

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DHP/620-HIM BOX DATA POINT CONFIGURATION FORM
(Continued)

```
HG DHP BOX POINT DISPL/

16A PORT NUMBER           |___|     (Default = 1
      (PC7PORT
16B PORT ADDRESS          |___|___|___|     (Default = 0
      (PC7PORTA
16C KEEP ALIVE ADDRESS    |___|___|___|___|     (Default = 0
      (PC7ALIVE
16D KEEP ALIVE BIT POSITIO|___|___|     (Default = 0
      (PC7ALVBT
16E SPECIFIER             |___|     (Default = 0
      (PC7ALVSP              __
17  PC8 MODEL TYPE           NOTCONFG  M384      M484      M584  (For Moc
      (PC8TYPE)              ------------------------------
                             NOTCONFG  APLC      APLC2     APl
                             APLC220   APLC230   AMINPLC2  (For Allen Bra
                             ------------------------------
                             NOTCONFG  IPC620  (For Honeyw
                             ------------------------------

17A PORT NUMBER           |___|     (Default = 1
      (PC8PORT
17B PORT ADDRESS          |___|___|___|     (Default = 0
      (PC8PORTA
17C KEEP ALIVE ADDRESS    |___|___|___|___|     (Default = 0
      (PC8ALIVE
17D KEEP ALIVE BIT POSITIO|___|___|     (Default = 0
      (PC8ALVBT
17E SPECIFIER             |___|     (Default = 0
      (PC8ALVSP)             (Default = NO
18   SLOT 1 TYPE             NONE      DIGIN     DIGOUT  (Default =
      (PIUCRDTY)             ANALOGIN  ANALOGOT  COU

19   SLOT 2 TYPE             NONE      DIGIN     DIGOUT  (Default =
                             ANALOGIN  ANALOGOT  COU
20   SLOT 3 TYPE             NONE      DIGIN     DIGOUT  (Default =
                             ANALOGIN  ANALOGOT  COU
21   SLOT 4 TYPE             NONE      DIGIN     DIGOUT  (Default =
                             ANALOGIN  ANALOGOT  COU
22   SLOT 5 TYPE             NONE      DIGIN     DIGOUT  (Default =
                             ANALOGIN  ANALOGOT  COU
23   SLOT 6 TYPE             NONE      DIGIN     DIGOUT  (Default =
                             ANALOGIN  ANALOGOT  COU
24   SLOT 7 TYPE             NONE      DIGIN     DIGOUT  (Default =
                             ANALOGIN  ANALOGOT  COU
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-4 — Instructions for DHP/620-HIM Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG DHP BOX POINT DISPLAY	
10B– 17B	PORT ADDRESS (PC1PORTA) to (PC8PORTA)	Enter the device address of each PC (PC1–PC8) as follows: Entry — Description 0 — Undefined 1–247 (Decimal) — Valid addresses for Modicon 1–247 — Valid addresses for Honeywell 1–377 (Octal) — Valid addresses for Allen Bradley (Default = 0)	For a 620 HIM use the default value. Defines the address of a PC on a DHP port. A zero (0) entry indicates that the PC is not configured. Range is from 0 to 255, but only entries in the listed ranges are accepted during a configuration load.
10C– 17C	KEEP ALIVE ADDRESS (PC1ALIVE) to (PC8ALIVE)	If ALLENBRD has been entered in Line 7, the Keep Alive Address has a range from 0 to 177717 (octal). Enter the first four most significant digits (1777 maximum) in octal form in lines 10C–17C per the applicable PC. (Range is from 0 to 9999, but only entries in 0 to 1777 range are accepted during a configuration load.) (Default = 0)	The Keep Alive Address is the address within the PC that must be periodically updated by the DHP (or 620 HIM) to inform the PC that the DHP (or 620 HIM) is "alive." If the DHP (or 620 HIM) is "alive," all output data points (if the PC is appropriately configured) are switched to PC ladder logic control. This address is divided into two parts as follows (using address 177717 as an example): 1777 — Keep Alive Address 17 — Keep Alive Bit Position The four most significant digits (Keep Alive Address) are entered on this line. The two least significant digits (Keep Alive Bit Position) are entered on Lines 10D–17D per the applicable PC.

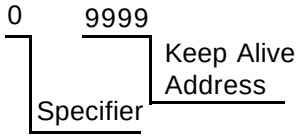
(Continued)

DHP/620-HIM BOX DATA POINT CONFIGURATION FORM
(Continued)

HG	DHP BOX POINT DISPL/			
25	SLOT 8 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
26	SLOT 9 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
27	SLOT 10 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
28	SLOT 11 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
29	SLOT 12 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
30	SLOT 13 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
31	SLOT 14 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
32	SLOT 15 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
33	SLOT 17 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
34	SLOT 18 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
35	SLOT 19 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
36	SLOT 20 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
37	SLOT 21 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
38	SLOT 22 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
39	SLOT 23 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU
40	SLOT 24 TYPE	NONE	DIGIN	DIGOUT (Default =
		ANALOGIN	ANALOGOT	COU

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-4 — Instructions for DHP/620-HIM Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG DHP BOX POINT DISPLAY	
		If MODICON or HONYWELL had been entered in Line 7, the Keep Alive Address has a range from 0 to 09999 (Decimal). Enter the four least significant digits (for HONEYWELL or Modicon Model 584) or three least significant digits (for Modicon Models 484 and 384 in decimal form in lines 10C–17C.	This address is divided into two parts as follows (using address 49999 as an example):  The four least significant digits (Keep Alive Address) are entered in Lines 10C–17C per the applicable PC. The most significant digit (Specifier, which is always 0) is already entered as a default in Lines 10E–17E.
10D–17D	KEEP ALIVE BIT POSITION (PC1ALVBT) to (PC8ALVBT)	Enter an octal number from 00–17. (Default = 0)	Make entries in Lines 10D–15D only if ALLENBRD is entered in Line 7.
10E–17E	SPECIFIER (PC1ALVSP) to (PC8ALVSP)	(Default = 0)	No entry is required. If MODICON or HONYWELL has been selected in Line 7, only value 0 is legal.
18–32 & 33–47	SLOT 1–15 TYPE (PIUCRDTY) SLOT 17–31 TYPE (PIUCRDTY) (Default = NONE)	Circle one: NONE DIGIN DIGOUT ANALOGIN ANALOGOT COUNTER	Define the types of data points in DHP slots 1–15 and DHP/620-HIM slots 1–15 and 17–31.

(Continued)

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DHP/620-HIM BOX DATA POINT CONFIGURATION FORM
(Continued)

HG DHP BOX POINT DISPLAY

```
41   SLOT 25 TYPE            NONE      DIGIN     DIGOUT
                             ANALOGIN  ANALOGOT  COUNTER (Default = NONE)
42   SLOT 26 TYPE            NONE      DIGIN     DIGOUT
                             ANALOGIN  ANALOGOT  COUNTER (Default = NONE)
43   SLOT 27 TYPE            NONE      DIGIN     DIGOUT
                             ANALOGIN  ANALOGOT  COUNTER (Default = NONE)
44   SLOT 28 TYPE            NONE      DIGIN     DIGOUT
                             ANALOGIN  ANALOGOT  COUNTER (Default = NONE)
45   SLOT 29 TYPE            NONE      DIGIN     DIGOUT
                             ANALOGIN  ANALOGOT  COUNTER (Default = NONE)
46   SLOT 30 TYPE            NONE      DIGIN     DIGOUT
                             ANALOGIN  ANALOGOT  COUNTER (Default = NONE)
47   SLOT 31 TYPE            NONE      DIGIN     DIGOUT
                             ANALOGIN  ANALOGOT  COUNTER (Default = NONE)
48  CHANGE DETECTION         NOTCONFG  DETECT    SET (Default = NOTCONFG)
      (CHNGFLAG)
49  EVENT PROCESSING         DISABLE   ENABLE  (Default = DISABLE)
      (EVENTPRC)
50  VARIABLE DEADBAND        OFF       ON      (Default = OFF)
    (BOXVDB)

60  TOG INTERVAL 1        |_|_|_|_|_|       (Default = 0 seconds)
***   (BOXTOG1)
61  TOG INTERVAL 2        |_|_|_|_|_|       (Default = 0 seconds)
***   (BOXTOG2)
61A SLOT 1 TOG INTERVAL      INTERVL1  INTERVL2 (Default = INTERVL1)
      (TOGINTSL)

61B SLOT 2 TOG INTERVAL      INTERVL1  INTERVL2 (Default = INTERVL1)
61C SLOT 3 TOG INTERVAL      INTERVL1  INTERVL2 (Default = INTERVL1)
61D SLOT 4 TOG INTERVAL      INTERVL1  INTERVL2 (Default = INTERVL1)
61E SLOT 5 TOG INTERVAL      INTERVL1  INTERVL2 (Default = INTERVL1)
61F SLOT 6 TOG INTERVAL      INTERVL1  INTERVL2 (Default = INTERVL1)
61G SLOT 7 TOG INTERVAL      INTERVL1  INTERVL2 (Default = INTERVL1)
61H SLOT 8 TOG INTERVAL      INTERVL1  INTERVL2 (Default = INTERVL1)
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-4 — Instructions for DHP/620-HIM Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG DHP BOX POINT DISPLAY	
			If REGULAR is entered in Line 6, make entries in Lines 18–32 for slots 1–15. If EXTENDED is entered in Line 6, make entries in Lines 18–47 for slots 1–15 and 17–31. Slot 16 is reserved for DHP/PC/620 HIM configuration and box status. Slot 32 is reserved for future use. NONE = This slot is not used. DIGIN = Digital Input Data Points. DIGOUT = Digital Output Data Points. ANALOGIN = Analog Input Data Points. ANALOGOT = Analog Output Data Points. COUNTER = Counter Data Points.
48	CHANGE DETECTION (CHNGFLAG)	Circle one: NOTCONFG DETECT SET (Default = NOTCONFG)	Select: –NOTCONFG if no preferred devices are on this Data Hiway. (Speeds up communication.) –DETECT to enable HG to alert LCN devices such as Universal Stations to changes in DHP (or 620 HIM) status that originated in preferred devices on the same Data Hiway. –SET to enable LCN device such as a Universal Station to alert preferred devices to changes it makes in the DHP (or 620 HIM) on the same Data Hiway.

(Continued)

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DHP/620-HIM BOX DATA POINT CONFIGURATION FORM
(Continued)

HG DHP BOX POINT DISPL

52I SLOT 9 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52J SLOT 10 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52K SLOT 11 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52L SLOT 12 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52M SLOT 13 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52N SLOT 14 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52O SLOT 15 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AA SLOT 17 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AB SLOT 18 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AC SLOT 19 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AD SLOT 20 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AE SLOT 21 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AF SLOT 22 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AG SLOT 23 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AH SLOT 24 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AI SLOT 25 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AJ SLOT 26 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AK SLOT 27 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AL SLOT 28 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AM SLOT 29 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52AN SLOT 30 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI
52A0 SLOT 31 TOG INTERVAL	INTERVL1	INTERVL2	(Default = INTEI

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-4 — Instructions for DHP/620-HIM Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG DHP BOX POINT DISPLAY	
49	EVENT PROCESSING (EVENTPRC)	Circle one: DISABLE ENABLE (Default = DISABLE)	Select ENABLE if process alarms, process changes, and operator messages are to be routed through this HG to an LCN.
50 ***	TOG INTERVAL 1 (BOXTOG1)	Enter 0 to 9999 seconds 0 = Never shed (Default = 0 seconds)	TOG (Time-Out Gate) intervals are user-specified, selectable maximum times between successive transmissions from a supervisory controller to a particular slot in this DHP (or 620 HIM) box. If the selected interval is exceeded, the slot sheds from its normal mode. If TOG1 or TOG2 is zero, no selection is provided and lines 51A–51AO are skipped.
51 ***	TOG INTERVAL 2 (BOXTOG2)		
51A–51O	SLOT 1–15 TOG INTERVAL (TOGINTSL)	Circle one: INTERVL1 INTERVL2 (Default = INTERVL1)	Specifies whether TOG INTERVAL 1 or (INTERVL1) TOG INTERVAL 2 (INTERVL2) (lines 50, 51) is to be used as the TOG interval for a given slot.
51AA–51AO	SLOT 17–31 TOG INTERVAL (TOGINTSL)	Circle one: INTERVL1 INTERVL2 (Default = INTERVL1)	Specifies whether TOG INTERVAL 1 (INTERVL1) or TOG INTERVAL 2 (INTERVL2) (lines 51, 52) is to be used as the TOG interval for a given slot.

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EC BOX DATA POINT CONFIGURATION FORM

```
HG EC BOX POINT DISPLA

                              └─┘└─┘
1   HIWAY NUMBER                        (Default = 1
      (HWYNUM
2   BOX NUMBER                └─┘└─┘    (Default = 5
      (BOXNUM
3   BOX TYPE                    CB          AU          HLPIU
      (BOXTYPE)                 LEPIU       CBRCD       EC
                                MC          MCRCD       DHP
                                H4500       HG          GPCI     NOTCONFG  (
EC)
4   BOX ASSIGNMENT              THISHG      REMOTEHG    ADDEDHG       (Defa
**    (BOXASSN)                                                      TH
5   LOAD DESTINATION            HG        HG HIWAY (Default =
**    (LOADDEST
6   CHANGE DETECTION            NOTCONFG    DETECT      SET  (Default = NOTC
      (CHNGFLAG
7   EVENT PROCESSING            DISABLE ENABLE  (Default = DISA
      (EVENTPRC
8   TOG INTERVAL 1          └─┘└─┘└─┘└─┘└─┘     (Default = 0
***   (BOXTOG1
9   TOG INTERVAL 2          └─┘└─┘└─┘└─┘└─┘     (Default = 0
***   (BOXTOG2
9A  SLOT 1 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
      (TOGINTSL
9B  SLOT 2 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9C  SLOT 3 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9D  SLOT 4 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9F  SLOT 5 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9G  SLOT 6 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9H  SLOT 7 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9I  SLOT 8 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9J  SLOT 9 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9K  SLOT 10 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9L  SLOT 11 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9M  SLOT 12 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9N  SLOT 13 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9O  SLOT 14 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9P  SLOT 15 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9Q  SLOT 16 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.5 EC Box Data Point (Box/Slot) Configuration Form *SW88-534*

Table 2-5 contains instructions for Configuration Form *SW88-534*.

Table 2-5 — Instructions for EC Box Data Point Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG EC BOX POINT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN node configuration.*
2	BOX NUMBER (BOXNUM)	Enter a number from 1 to 63 Default = 5)	Defines the hiway address of this EC box on the Data Hiway.
3	BOX TYPE (BOXTYPE)	Enter EC	
4	BOX ASSIGNMENT (BOXASSN)	Circle one: THISHG REMOTEHG ADDEDHG H4500 (Default = THISHG)	Defines the function relative to this EC of <u>each</u> HG on the same physical Data Hiway. Refer to Table 2-2 and to heading 2.1.3. If AddedHG is entered, configuration is complete.
5	LOAD DESTINATION (LOADDEST)	Circle one: HG HG_HIWAY	Define the destination of this configuration information. If ThisHG is entered on line 4 and HG HG_HIWAY is entered on line 5, fill in the rest of this form including lines 8–9Q; otherwise, fill in only lines 6 and 7.
6	CHANGE DETECTION (CHNGFLAG)	Circle one: NOTCONFG DETECT SET (Default = NOTCONFG)	Select: –NOTCONFG if no preferred devices are on this Data Hiway (Speeds up communication.) –DETECT to enable HG to alert LCN devices such as Universal Stations to changes in EC status that originated in preferred devices on the same Data Hiway or in the EC (by external mode switching).

(Continued)

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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EC BOX DATA POINT CONFIGURATION FORM

```
HG EC BOX POINT DISPL

                              └─┘└─┘
1   HIWAY NUMBER                        (Default = 1
      (HWYNUM
2   BOX NUMBER                └─┘└─┘    (Default = 5
      (BOXNUM
3   BOX TYPE                    CB          AU          HLPIU
      (BOXTYPE)                 LEPIU       CBRCD       EC
                                MC          MCRCD       DHP
                                H4500       HG          GPCI     NOTCONFG  (
EC)
4   BOX ASSIGNMENT              THISHG      REMOTEHG    ADDEDHG       (Defa
**    (BOXASSN)                                                      TH
5   LOAD DESTINATION            HG        HG HIWAY (Default =
**    (LOADDEST
6   CHANGE DETECTION            NOTCONFG    DETECT      SET  (Default = NOTC
      (CHNGFLAG
7   EVENT PROCESSING            DISABLE ENABLE  (Default = DISA
      (EVENTPRC
8   TOG INTERVAL 1          └─┘└─┘└─┘└─┘└─┘     (Default = 0
***   (BOXTOG1
9   TOG INTERVAL 2          └─┘└─┘└─┘└─┘└─┘     (Default = 0
***   (BOXTOG2
9A  SLOT 1 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
      (TOGINTSL
9B  SLOT 2 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9C  SLOT 3 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9D  SLOT 4 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9F  SLOT 5 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9G  SLOT 6 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9H  SLOT 7 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9I  SLOT 8 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9J  SLOT 9 TOG INTERVAL       INTERV1   INTERV2  (Default = INTI
9K  SLOT 10 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9L  SLOT 11 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9M  SLOT 12 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9N  SLOT 13 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9O  SLOT 14 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9P  SLOT 15 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
9Q  SLOT 16 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-5 — Instructions for EC Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG EC BOX POINT DISPLAY	
			–SET to enable LCN device, such as a Universal Station, to alert preferred devices to changes it makes in the EC on the same Data Hiway.
7	EVENT PROCESSING (EVENTPROC)	Circle one: DISABLE ENABLE (Default = DISABLE)	Select ENABLE if process alarms, process changes, and operator messages are to be routed through this HG to an LCN.
8 ***	TOG INTERVAL 1 (BOXTOG1)	Enter 0 to 9999 seconds	TOG (Time-Out Gate) intervals are user-specified, selectable maximum times between successive transmissions from a supervisory controller to a particular slot in this EC box. If the selected interval is exceeded, the slot sheds from its normal mode. If TOG1 or TOG2 is zero, no selection is provided and lines 9A–9Q are skipped.
9 ***	TOG INTERVAL 2 (BOXTOG2)	0 = Never shed (Default = 0 seconds)	
(See Note)			
9A–9I	SLOT 1–8 TOG INTERVAL (TOGINTSL)	Circle one: INTERV1 INTERV2 (Default = INTERV1)	Specifies whether TOG INTERVAL 1 (INTERV1) or TOG INTERVAL 2 (INTERV2) entered on Lines 8 and 9 is to be the time-out gate interval for the particular slot.
9J–9Q	SLOT 9–16 TOG NTERVAL (TOGINTSL)	Circle one: INTERV1 INTERV2 (Default = INTERV1)	Specifies whether TOG INTERVAL 1 (INTERV1) or TOG INTERVAL 2 (INTERV2) entered on Lines 8 and 9 is to be the time-out gate interval for the particular slot.

NOTE

In the following instructions, similar entries are grouped to avoid cumbersome repetition. The line numbers of instructions and form entries correspond to each other, but are not shown on facing pages.

HLPIU BOX DATA POINT CONFIGURATION FORM

HG	HLPIU BOX POINT DISPLA				
1	HIWAY NUMBER	└__┘	(Default = 1)		
	(HWYNUM)				
2	BOX NUMBER	└__┘	(Default = 0)		
	(BOXNUM)				
3	BOX TYPE	CB	AU	HLPIU	LI
	(BOXTYPE)	LEPIU	CBRCD	EC	EC
		MC	MCRCD	DHP	OI
		H4500	HG	GPCI	NOTCONFG (E
					HLPIU)
4	BOX ASSIGNMENT	THISHG	REMOTEHG	ADDEDHG	SET (Defau
**	(BOXASSN)				(THI
5	LOAD DESTINATION	HG	HG HIWAY	(Default =	
**	(LOADDEST				
6	PIU BOX SIZE	REGULAR	EXTENDED	(Default = REGU	
	(BOXSIZE				
7	SLOT 1 CARD TYPE	NONE	DIGIN	DIGOUT	(Default = N
	(PIUCRDTY)	ANALOGIN	ANALOGOT	COUN	
7A	SLOT 1 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTIF
	(PIUCRDOP				
7B	SLOT 1 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULSE	
	(PIUCRDOP				
7C	SLOT 1 CARD OPTION	COUNTR16	COUNTR32	(Default = COUNT	
	(PIUCRDOP				
8	SLOT 2 CARD TYPE	NONE	DIGIN	DIGOUT	(Default = N
	(PIUCRDTY)	ANALOGIN	ANALOGOT	COUN	
8A	SLOT 2 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTIF
	(PIUCRDOP				
8B	SLOT 2 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULSE	
	(PIUCRDOP				
8C	SLOT 2 CARD OPTION	COUNTR16	COUNTR32	(Default = COUNT	
	(PIUCRDOP				

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.6 HLPIU Box Data Point (Box/Slot) Configuration Form *SW88-535*

Table 2-6 contains instructions for Configuration Form *SW88-53*5

Table 2-6 — Instructions for HLPIU Box Data Point Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG HLPIU BOX POINT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN node configuration.*
2	BOX NUMBER (BOXNUM)	Enter a number from 1 to 63 (Default = 0)	Defines the hiway address of this HLPIU box on the Data Hiway.
3	BOX TYPE (BOXTYPE)	Enter HLPIU	
4 **	BOX ASSIGNMENT (BOXASSN)	Circle one: THISHG REMOTEHG ADDEDHG (Default = THISHG)	Defines the function relative to this HLPIU of <u>each</u> HG on the same physical Data Hiway. (Refer to Table 2-2 and to heading 2.1.3.) If AddedHG is entered, configuration is complete.
5 **	LOAD DESTINATION (LOADDEST)	Circle one: HG HG_HIWAY (Default = HG)	If ThisHG was entered on line 4 and HG_HIWAY is entered on line 5, fill in the rest of this form, including lines 42–43AF, as applicable; otherwise, fill in the rest of this form except for lines 42–43AF.
6	PIU BOX SIZE (BOXSIZE)	Circle one: REGULAR EXTENDED (Default = REGULAR)	If REGULAR (up-to-16 implemented board slots) is entered, only Lines 7 through 22 are revealed. If EXTENDED (more than 16 implemented board slots) is entered, Lines 23 through 38C are also revealed.

(Continued)

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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HLPIU BOX DATA POINT CONFIGURATION FORM

HG HLPIU BOX POINT DISPL/				
9 SLOT 3 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COU	(Default =
9A SLOT 3 CARD OPTION (PIUCRDOP	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
9B SLOT 3 CARD OPTION (PIUCRDOP	PULSEOUT	LATCHOUT		(Default = PULS
9C SLOT 3 CARD OPTION (PIUCRDOP	COUNTR16	COUNTR32		(Default = COUN
10 SLOT 4 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COU	(Default =
10A SLOT 4 CARD OPTION (PIUCRDOP	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
10B SLOT 4 CARD OPTION (PIUCRDOP	PULSEOUT	LATCHOUT		(Default = PULS
10C SLOT 4 CARD OPTION (PIUCRDOP	COUNTR16	COUNTR32		(Default = COUN
11 SLOT 5 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COU	(Default =
11A SLOT 5 CARD OPTION (PIUCRDOP	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
11B SLOT 5 CARD OPTION (PIUCRDOP	PULSEOUT	LATCHOUT		(Default = PULS
11C SLOT 5 CARD OPTION (PIUCRDOP	COUNTR16	COUNTR32		(Default = COUN
12 SLOT 6 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COU	(Default =
12A SLOT 6 CARD OPTION (PIUCRDOP	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
12B SLOT 6 CARD OPTION (PIUCRDOP	PULSEOUT	LATCHOUT		(Default = PULS
12C SLOT 6 CARD OPTION (PIUCRDOP	COUNTR16	COUNTR32		(Default = COUN

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-6 — Instructions for HLPIU Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG HLPIU BOX POINT DISPLAY	
			NOTE: The following subslot addresses are not available for an HLPU when analog input cards are installed in these slots: slot 16 subslot 8, and slot 32 subslot 8.
7–38 (See NOTE)	SLOTS 1–32 CARD TYPE (PIUCRDTY)	Circle one: NONE DIGIN DIGOUT COUNTER ANALOGOT ANALOGIN (Default = NONE)	Defines a card type for each of the 32 slots in the HLPIU. If NONE, COUNTER, ANALOGOT, or ANALOGIN is entered for a particular slot, skip the SLOT CARD OPTION Lines for that slot and go to the next SLOT CARD TYPE Line for the next slot. NONE = No card in this slot DIGIN = Digital Input DIGOUT = Digital Output COUNTER = Counter Input ANALOGOT = Analog Output ANALOGIN = Analog Input
7A–38A	SLOTS 1–32 CARD OPTION (PIUCRDOP)	If DIGIN has been entered on the SLOT CARD TYPE Line Circle one: NOTIFYST CHNGDECT SOE (Default = No Options)	NOTIFYST = Notify Status CHNGDECT = Change Detect (Latched) SOE = Sequence of Events

(Continued)

NOTE

In the following instructions, similar entries are grouped to avoid cumbersome repetition. The line numbers of instructions and form entries correspond to each other, but are not shown on facing pages.

HLPIU BOX DATA POINT CONFIGURATION FORM

HG HLPIU BOX POINT DISPL/				
13 SLOT 7 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
13A SLOT 7 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
13B SLOT 7 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS|	
(PIUCRDOP				
13C SLOT 7 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN'	
(PIUCRDOP				
14 SLOT 8 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
14A SLOT 8 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
14B SLOT 8 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS|	
(PIUCRDOP				
14C SLOT 8 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN'	
(PIUCRDOP				
15 SLOT 9 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
15A SLOT 9 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
15B SLOT 9 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS|	
(PI9CRDOP				
15C SLOT 9 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN'	
(PIUCRDOP				
16 SLOT 10 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
16A SLOT 10 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
16B SLOT 10 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS|	
(PIUCRDOP				
16C SLOT 10 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN'	
(PIUCRDOP				

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-6 — Instructions for HLPIU Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG HLPIU BOX POINT DISPLAY	
7B–38B	SLOTS 1–32 CARD OPTION (PIUCRDOP)	If DIGOUT has been entered on the SLOT CARD TYPE Line Circle one: PULSEOUT LATCHOUT (Default = No Options)	PULSEOUT = Pulsed Output LATCHOUT = Latched Output
7C–38C	SLOTS 1–32 CARD OPTION (PIUCRDOP)	If COUNTER has been entered on the SLOT CARD TYPE Line Circle one: COUNTR16 COUNTR32 (Default = No Options)	COUNTR16 = 16-bit pulse counter COUNTR32 = 32-bit pulse counter
39	CHANGE DETECTION (CHNGFLAG)	Circle one: NOTCONFG DETECT SET (Default = NOTCONFG)	Select: –NOTCONFG if no preferred devices are on this Data Hiway.(Speeds up communication.) –DETECT to enable HG to alert LCN devices, such as Universal Stations, to changes in HLPIU status that originated in preferred devices on the same Data Hiway. –SET to enable LCN device, such as a Universal Station, to alert preferred to changes it makes in an HLPIU on the same Hiway.
40	EVENT PROCESSING (EVENTPRC)	Circle one: DISABLE ENABLE	Select ENABLE if process alarms, process changes, and operator messages are to be routed through this HG to an LCN.

(Continued)

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HLPIU BOX DATA POINT CONFIGURATION FORM

HG HLPIU BOX POINT DISPL/				
17 SLOT 11 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COU	(Default =
17A SLOT 11 CARD OPTION (PIUCRDOP	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
17B SLOT 11 CARD OPTION (PIUCRDOP	PULSEOUT	LATCHOUT		(Default = PULSI
17C SLOT 11 CARD OPTION (PIUCRDOP	COUNTR16	COUNTR32		(Default = COUN
18 SLOT 12 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COU	(Default =
18A SLOT 12 CARD OPTION (PIUCRDOP	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
18B SLOT 12 CARD OPTION (PIUCRDOP	PULSEOUT	LATCHOUT		(Default = PULSI
18C SLOT 12 CARD OPTION (PIUCRDOP	COUNTR16	COUNTR32		(Default = COUN
19 SLOT 13 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COU	(Default =
19A SLOT 13 CARD OPTION (PIUCRDOP	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
19B SLOT 13 CARD OPTION (PIUCRDOP	PULSEOUT	LATCHOUT		(Default = PULSI
19C SLOT 13 CARD OPTION (PIUCRDOP	COUNTR16	COUNTR32		(Default = COUN
20 SLOT 14 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COU	(Default =
20A SLOT 14 CARD OPTION (PIUCRDOP	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
20B SLOT 14 CARD OPTION (PIUCRDOP	PULSEOUT	LATCHOUT		(Default = PULSI
20C SLOT 14 CARD OPTION (PIUCRDOP	COUNTR16	COUNTR32		(Default = COUN

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-6 — Instructions for HLPIU Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG HLPIU BOX POINT DISPLAY	
41 *** 42 *** (See Note)	TOG INTERVAL 1 (BOXTOG1) TOG INTERVAL 2 (BOXTOG2)	Enter 0 to 9999 seconds 0 = Never shed (Default = 0 seconds)	Time-Out-Gate (TOG) intervals 1 & 2 enable selection of either of two time-out intervals for each slot in this EC.box. The time-out interval is the time between two successive transmissions from a supervisory controller to a particular slot in this box. If a time-out interval is exceeded, the respective slot is automatically placed in the manual mode. If BOXTOG1 OR BOXTOG2 is zero, no selection is provided; skip lines 42A–42AF.
42A–42AF	SLOTS 1–32 TOG INTERVAL (TOGINTSL)	Circle one: INTERV1 INTERV2 (Default = INTERV1)	Specifies whether TOG INTERVAL 1 (INTERV1) or TOG INTERVAL 2 (INTERV2) entered on Lines 41 and 42 is to be the time-out gate interval for the particular slot. Lines 42P–42AF are revealed only if EXTENDED is selected for PIU BOX SIZE on Line 4.

HLPIU BOX DATA POINT CONFIGURATION FORM

HG HLPIU BOX POINT DISPL/				
21 SLOT 15 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
21A SLOT 15 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
21B SLOT 15 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
21C SLOT 15 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				
22 SLOT 16 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
22A SLOT 16 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
22B SLOT 16 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
22C SLOT 16 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				
23 SLOT 17 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
23A SLOT 17 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
23B SLOT 17 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
23C SLOT 17 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				
24 SLOT 18 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
24A SLOT 18 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
24B SLOT 18 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
24C SLOT 18 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

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HLPIU BOX DATA POINT CONFIGURATION FORM

HG HLPIU BOX POINT DISPLAY				
25 SLOT 19 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COUNTER	(Default = NONE)
25A SLOT 19 CARD OPTION (PIUCRDOP)	NOTIFYST	CHNGDECT	SOE	(Default = NOTIFYST)
25B SLOT 19 CARD OPTION (PIUCRDOP)	PULSEOUT	LATCHOUT		(Default = PULSEOUT)
25C SLOT 19 CARD OPTION (PIUCRDOP)	COUNTR16	COUNTR32		(Default = COUNTR16)
26 SLOT 20 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COUNTER	(Default = NONE)
26A SLOT 20 CARD OPTION (PIUCRDOP)	NOTIFYST	CHNGDECT	SOE	(Default = NOTIFYST)
26B SLOT 20 CARD OPTION (PIUCRDOP)	PULSEOUT	LATCHOUT		(Default = PULSEOUT)
26C SLOT 20 CARD OPTION (PIUCRDOP)	COUNTR16	COUNTR32		(Default = COUNTR16)
27 SLOT 21 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COUNTER	(Default = NONE)
27A SLOT 21 CARD OPTION (PIUCRDOP)	NOTIFYST	CHNGDECT	SOE	(Default = NOTIFYST)
27B SLOT 21 CARD OPTION (PIUCRDOP)	PULSEOUT	LATCHOUT		(Default = PULSEOUT)
27C SLOT 21 CARD OPTION (PIUCRDOP)	COUNTR16	COUNTR32		(Default = COUNTR16)
28 SLOT 22 CARD TYPE (PIUCRDTY)	NONE ANALOGIN	DIGIN ANALOGOT	DIGOUT COUNTER	(Default = NONE)
28A SLOT 22 CARD OPTION (PIUCRDOP)	NOTIFYST	CHNGDECT	SOE	(Default = NOTIFYST)
28B SLOT 22 CARD OPTION (PIUCRDOP)	PULSEOUT	LATCHOUT		(Default = PULSEOUT)
28C SLOT 22 CARD OPTION (PIUCRDOP)	COUNTR16	COUNTR32		(Default = COUNTR16)

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

HLPIU BOX DATA POINT CONFIGURATION FORM

HG HLPIU BOX POINT DISPL/				
29 SLOT 23 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
29A SLOT 23 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
29B SLOT 23 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
29C SLOT 23 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				
30 SLOT 24 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
30A SLOT 24 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
30B SLOT 24 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
30C SLOT 24 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				
31 SLOT 25 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
31A SLOT 25 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
31B SLOT 25 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
31C SLOT 25 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				
32 SLOT 26 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
32A SLOT 26 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
32B SLOT 26 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
32C SLOT 26 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

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HLPIU BOX DATA POINT CONFIGURATION FORM

HG HLPIU BOX POINT DISPL/				
33 SLOT 27 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
33A SLOT 27 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
33B SLOT 27 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
33C SLOT 27 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				
34 SLOT 28 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
34A SLOT 28 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
34B SLOT 28 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
34C SLOT 28 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				
35 SLOT 29 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
35A SLOT 29 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
35B SLOT 29 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
35C SLOT 29 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				
36 SLOT 30 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
36A SLOT 30 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
36B SLOT 30 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULS	
(PIUCRDOP				
36C SLOT 30 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN	
(PIUCRDOP				

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

HLPIU BOX DATA POINT CONFIGURATION FORM

HG HLPIU BOX POINT DISPL/				
37 SLOT 31 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
37A SLOT 31 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
37B SLOT 31 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULSI	
(PIUCRDOP				
37C SLOT 31 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN'	
(PIUCRDOP				
38 SLOT 32 CARD TYPE	NONE	DIGIN	DIGOUT	(Default =
(PIUCRDTY)	ANALOGIN	ANALOGOT	COU	
38A SLOT 32 CARD OPTION	NOTIFYST	CHNGDECT	SOE	(Default = NOTI
(PIUCRDOP				
38B SLOT 32 CARD OPTION	PULSEOUT	LATCHOUT	(Default = PULSI	
(PIUCRDOP				
38C SLOT 32 CARD OPTION	COUNTR16	COUNTR32	(Default = COUN'	
(PIUCRDOP				

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

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HLPIU BOX DATA POINT CONFIGURATION FORM

HG	HLPIU BOX POINT DISPL/			
39	CHANGE DETECTION (CHNGFLAG	NOTCONFG	DETECT	SET (Default = NOTC
40	EVENT PROCESSING (EVENTPRC	DISABLE	ENABLE	(Default = DIS/
41	TOG INTERVAL 1	____		(Default = 0 seconds
***	(BOXTOG1			
42	TOG INTERVAL 2	____		(Default = 0 seconds
***	(BOXTOG2			
42A	SLOT 1 TOG INTERVAL (TOGINTSL	INTERV1	INTERV2	(Default = INTI
42B	SLOT 2 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42C	SLOT 3 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42D	SLOT 4 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42E	SLOT 5 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42F	SLOT 6 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42G	SLOT 7 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42H	SLOT 8 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42I	SLOT 9 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42J	SLOT 10 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42K	SLOT 11 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42L	SLOT 12 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42M	SLOT 13 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42N	SLOT 14 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42O	SLOT 15 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

HLPIU BOX DATA POINT CONFIGURATION FORM

HG	HLPIU BOX POINT DISPL/			
42P	SLOT 16 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42Q	SLOT 17 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42R	SLOT 18 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42S	SLOT 19 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42T	SLOT 20 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42U	SLOT 21 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42V	SLOT 22 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42W	SLOT 23 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42X	SLOT 24 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42Y	SLOT 25 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42Z	SLOT 26 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42AA	SLOT 27 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42AB	SLOT 28 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42AC	SLOT 29 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42AD	SLOT 30 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42AE	SLOT 31 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
42AF	SLOT 32 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

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LEPIU BOX DATA POINT CONFIGURATION FORM

HG LEPIU BOX POINT DISPL/					
1	HIWAY NUMBER	└__┘└__┘	(Default = 1		
	(HWYNUM				
2	BOX NUMBER	└__┘└__┘	(Default = 5		
	(BOXNUM				
3	BOX TYPE	CB	AU	HLPIU	L
	(BOXTYPE)	LEPIU	CBRCD	EC	E
		MC	MCRCD	DHP	C
		H4500	HG	GPCI	NOTCONF (
LEPIU)					
4	BOX ASSIGNMENT	THISHG	REMOTEHG	ADDEDHG	H
	(BOXASSN)			(Default = TH:	
5	LOAD DESTINATION	HG	HG HIWAY	(Default =	
	(LOADDEST				
6	PIU BOX SIZE	REGULAR	EXTENDED	(Default = REG(	
	(BOXSIZE				
7	SLOT 1 CARD TYPE	NONE	ANALOGIN	(Default = NONE for	
	(PIUCRDTY)			Card S	
8	SLOT 2 CARD TYPE	NONE	ANALC		
9	SLOT 3 CARD TYPE	NONE	ANALC		
10	SLOT 4 CARD TYPE	NONE	ANALC		
11	SLOT 5 CARD TYPE	NONE	ANALC		
12	SLOT 6 CARD TYPE	NONE	ANALC		
13	SLOT 7 CARD TYPE	NONE	ANALC		
14	SLOT 8 CARD TYPE	NONE	ANALC		
15	SLOT 9 CARD TYPE	NONE	ANALC		
16	SLOT 10 CARD TYPE	NONE	ANALC		
17	SLOT 11 CARD TYPE	NONE	ANALC		
18	SLOT 12 CARD TYPE	NONE	ANALC		
19	SLOT 13 CARD TYPE	NONE	ANALC		
20	SLOT 14 CARD TYPE	NONE	ANALC		
21	SLOT 15 CARD TYPE	NONE	ANALC		
22	SLOT 16 CARD TYPE	NONE	ANALC		

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.7 LEPIU Box Data Point (Box/Slot) Configuration Form *SW88-536*

Table 2-7 contains instructions for Configuration Form *SW88-536*.

Table 2-7— Instructions for LEPIU Box Data Point Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG LEPIU BOX POINT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN node configuration.*
2	BOX NUMBER (BOXNUM)	Enter a number from 1 to 63 (Default = 0)	Defines the hiway address of this LEPIU box on the Data Hiway.
3	BOX TYPE (BOXTYPE)	Enter LEPIU	
4	BOX ASSIGNMENT (BOXASSN)	Circle one: THISHG REMOTEHG ADDEDHG H4500 (Default = THISHG)	Defines the function relative to this LEPIU of each HG on the same physical Data Hiway. (Refer to Table 2-2 and to heading 2.1.3.) If AddedHG is entered, configuration is complete.
5	LOAD DESTINATION (LOADDEST)	Circle one: HG HG_HIWAY (Default = HG)	Defines the destination of configuration data.
6	PIU BOX SIZE (BOXSIZE)	Circle one: REGULAR EXTENDED (Default = REGULAR)	If REGULAR (up-to-16 implemented slots) is entered, make entries in Lines 7 through 22. If EXTENDED (with more than 16 implemented slots) is entered, make entries in Lines 7 through 38.

(Continued)

NOTE

In the following instructions, similar entries are grouped to avoid cumbersome repetition. The line numbers of instructions and form entries correspond to each other, but are not shown on facing pages.

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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LEPIU BOX DATA POINT CONFIGURATION FORM
(Continued)

HG	LEPIU BOX POINT DISPL			
23	SLOT 17 CARD TYPE	NONE	ANALOGIN	(Default = NONE for
24	SLOT 18 CARD TYPE	NONE	ANALOGIN	Card Sl
25	SLOT 19 CARD TYPE	NONE	ANALC	
26	SLOT 20 CARD TYPE	NONE	ANALC	
27	SLOT 21 CARD TYPE	NONE	ANALC	
28	SLOT 22 CARD TYPE	NONE	ANALC	
29	SLOT 23 CARD TYPE	NONE	ANALC	
30	SLOT 24 CARD TYPE	NONE	ANALC	
31	SLOT 25 CARD TYPE	NONE	ANALC	
32	SLOT 26 CARD TYPE	NONE	ANALC	
33	SLOT 27 CARD TYPE	NONE	ANALC	
34	SLOT 28 CARD TYPE	NONE	ANALC	
35	SLOT 29 CARD TYPE	NONE	ANALC	
36	SLOT 30 CARD TYPE	NONE	ANALC	
37	SLOT 31 CARD TYPE	NONE	ANALC	
38	SLOT 32 CARD TYPE	NONE	ANALC	
39	CHANGE DETECTION (CHNGFLAG	NOTCONFG	DETECT SET	(Default = NOTC
40	EVENT PROCESSING (EVENTPRC	DISABLE	ENABLE	(Default = DIS/

Table 2-7 — Instructions for LEPIU Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG LEPIU BOX POINT DISPLAY	
			NOTE: The following subslot addresses are not available for use in the LEPIU: slot 16 subslot 8 (Remote box 8 last point), and slot 32 subslot 8 (Remote box16 last point).
7–38 (See NOTE	SLOTS 1–32 CARD TYPE (PIUCRDTY)	Circle one: NONE ANALOGIN (Default = NONE)	Defines a card type for each of the 32 slots in the LEPIU. NONE = No card in this slot ANALOGIN Analog Input
39	CHANGE DETECTION (CHNGFLAG)	Circle one: NOTCONFG DETECT SET (Default = NOTCONFG)	Select: –NOTCONFG if no preferred devices are on this Data Hiway. (Speeds up communication.) –DETECT to enable HG to alert LCN devices, such as Universal Stations, to changes in LEPIU status that originated in preferred devices on the same Data Hiway. –SET to enable LCN device, such as a Universal Station, to alert preferred devices to changes it makes to an LEPIU on the same Data Hiway.
40	EVENT PROCESSING (EVENTPRC)	Circle one: DISABLE ENABLE (Default = DISABLE)	Select ENABLE if process alarms, process changes, and operator messages are to be routed through this HG to an LCN.

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LLPIU BOX DATA POINT CONFIGURATION FORM

HG	LLPIU BOX POINT DISPL/				
1	HIWAY NUMBER	⌊__|__⌋	(Default = 1		
	(HWYNUM				
2	BOX NUMBER	⌊__|__⌋	(Default = 5		
	(BOXNUM				
3	BOX TYPE	CB	AU	HLPIU	L
	(BOXTYPE)	LEPIU	CBRCD	EC	E
		MC	MCRCD	DHP	C
		H4500	HG	GPCI	NOTCONF (Enter I
4	BOX ASSIGNMENT	THISHG	REMOTEHG	ADDEDHG	H
	(BOXASSN)	(Default = THIS			
5	LOAD DESTINATION	HG	HG HIWAY	(Default =	
	(LOADDEST				
6	PIU BOX SIZE	REGULAR	EXTEN		
	(BOXSIZE				
7	SLOT 1 CARD TYPE	NONE	ANALOGIN	(Default = NONE fo	
	(PIUCRDTY)			Card T)	
8	SLOT 2 CARD TYPE	NONE	ANALO		
9	SLOT 3 CARD TYPE	NONE	ANALO		
10	SLOT 4 CARD TYPE	NONE	ANALO		
11	SLOT 5 CARD TYPE	NONE	ANALO		
12	SLOT 6 CARD TYPE	NONE	ANALO		
13	SLOT 7 CARD TYPE	NONE	ANALO		
14	SLOT 8 CARD TYPE	NONE	ANALO		
15	SLOT 9 CARD TYPE	NONE	ANALO		
16	SLOT 10 CARD TYPE	NONE	ANALO		
17	SLOT 11 CARD TYPE	NONE	ANALO		
18	SLOT 12 CARD TYPE	NONE	ANALO		
19	SLOT 13 CARD TYPE	NONE	ANALO		
20	SLOT 14 CARD TYPE	NONE	ANALO		
21	SLOT 15 CARD TYPE	NONE	ANALO		
22	SLOT 16 CARD TYPE	NONE	ANALO		

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.8 LLPIU Box Data Point (Box/Slot) Configuration Form *SW88-537*

Table 2-8 contains instructions for Configuration Form *SW88-537*.

Table 2-8 — Instructions for LLPIU Box Data Point Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG LLPIU BOX POINT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN node configuration*.
2	BOX NUMBER (BOXNUM)	Enter a number from 1 to 63 (Default = 0)	Defines the hiway address of this LLPIU box on the Data Hiway.
3	BOX TYPE (BOXTYPE)	Enter LLPIU	
4	BOX ASSIGNMENT (BOXASSN)	Circle one: THISHG REMOTEHG ADDEDHG H4500 (Default = THISHG)	Defines the function relative to this LLPIU of <u>each</u> HG on the same physical Data Hiway. (Refer to Table 2-2 and to heading 2.1.3.) If AddedHG is entered, configuration is complete.
5	LOAD DESTINATION (LOADDEST)	Circle one: HG HG_HIWAY (Default = HG)	Defines the destination of configuration data.
6	PIU BOX SIZE (BOXSIZE)	Circle one: REGULATOR EXTENDED (Default = REGULAR)	If REGULAR (up-to-16 implemented slots) is entered, make entries in Lines 7 through 22. If EXTENDED (more than 16 implemented slots) is entered, make entries in Lines 7 through 38.

(Continued)

NOTE

In the following instructions, similar entries are grouped to avoid cumbersome repetition. The line numbers of instructions and form entries correspond to each other, but are not shown on facing pages.

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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LLPIU BOX DATA POINT CONFIGURATION FORM
(Continued)

HG	LLPIU BOX POINT DISPLAY			
23	SLOT 17 CARD TYPE	NONE	ANALOGIN	(Default = NONE for all
24	SLOT 18 CARD TYPE	NONE	ANALOGIN	Card Types)
25	SLOT 19 CARD TYPE	NONE	ANALOGIN	
26	SLOT 20 CARD TYPE	NONE	ANALOGIN	
27	SLOT 21 CARD TYPE	NONE	ANALOGIN	
28	SLOT 22 CARD TYPE	NONE	ANALOGIN	
29	SLOT 23 CARD TYPE	NONE	ANALOGIN	
30	SLOT 24 CARD TYPE	NONE	ANALOGIN	
31	SLOT 25 CARD TYPE	NONE	ANALOGIN	
32	SLOT 26 CARD TYPE	NONE	ANALOGIN	
33	SLOT 27 CARD TYPE	NONE	ANALOGIN	
34	SLOT 28 CARD TYPE	NONE	ANALOGIN	
35	SLOT 29 CARD TYPE	NONE	ANALOGIN	
36	SLOT 30 CARD TYPE	NONE	ANALOGIN	
37	SLOT 31 CARD TYPE	NONE	ANALOGIN	
38	SLOT 32 CARD TYPE	NONE	ANALOGIN	
39	CHANGE DETECTION (CHNGFLAG)	NOTCONFG	DETECT SET	(Default = NOTCONFG)
40	EVENT PROCESSING (EVENTPRC)	DISABLE	ENABLE	(Default = DISABLE)
41	VARIABLE DEADBAND (BOXVDB)	OFF	ON	(Default = OFF)

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-8 — Instructions for LLPIU Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG LLPIU BOX POINT DISPLAY	
8.			NOTE: The following subslot addresses are not available for use in an LLPIU: slot 1 subslot 1-4, slot 16 subslot 8, and slot 32 subslot
7–38 (See Note)	SLOTS 1–32 CARD TYPE (PIUCRDTY	Circle one: NONE ANALOGIN (Default = NONE)	Defines the card type for each of the 32 slots in the LLPIU.
39	CHANGE DETECTION (CHNGFLAG)	Circle one: NOTCONFG DETECT SET (Default = NOTCONFG)	Select: –NOTCONFG if no preferred devices are on this Data Hiway. (Speeds up communication.) –DETECT to enable HG to alert LCN devices such as Universal Stations to changes in LLPIU status that originated in preferred devices on the same Data Hiway. –SET to enable LCN device such as a Universal Station to alert preferred devices to changes it makes in an LLPIU on the same Hiway.
40	EVENT PROCESSING (EVENTPRC)	Circle one: DISABLE ENABLE (Default = DISABLE)	Select ENABLE if process alarms, process changes, and operator messages are to be routed through this HG to an LCN.
41	VARIABLE DEADBAND	OFF ON (Default = OFF)	Select ON to prevent PV alarm deadbands from being initialized to 1% during a checkpoint box load request when variable deadband failure is present. Select OFF when variable deadband firmware is first installed so PV alarm deadbands will be initialized during a checkpoint box load.

MC BOX DATA POINT CONFIGURATION FORM

```
HG MC BOX POINT DISPL/
1   HIWAY NUMBER            └──┘──┘      (Default = 1
      (HWYNUM
2   BOX NUMBER              └──┘──┘      (Default = 0
      (BOXNUM
3   BOX TYPE                   CB        AU        HLPIU     L
      (BOXTYPE)                LEPIU     CBRCD     EC        E
                               MC        MCRCD     DHP       C
                               H4500     HG        GPCI      NOTCONFG (Ente
4   BOX ASSIGNMENT             THISHG    REMOTEHG  ADDEDHG   H
**    (BOXASSN)                (Default = THIS
5   LOAD DESTINATION           HG        HG HIWAY  (Default =
**    (LOADDEST
6   MC REVISION CODE           REV20     REV30     REV31  (Default = R
      (MCREV
7   BOX TRENDING               NOTREND   TREND  (Default = NOTF
      (BOXTREND
8   ADDITIONAL SOPL MEMORY     NOSOPL    SOPL  (Default = NOS

      (SOPLMEM
9   C-LINK NUMBER           └──┘──┘      (Default = 1
      (BOXCLINK
10  ADDRESS NUMBER ON C-L   └──┘──┘      (Default = 1
      (CLINKNUM
11  LIBRARY                 └──┘      (Default = 1
      (LIBRYNUM
12  NUMBER OF I/O FILES     └──┘      (Default = 0
      (NMBRBCFL
12A SLOT 1 CARD TYPE           NONE      DIGIN     DIGOUT    ANALOGOT  CC
      (PIUCRDTY)               (Default = NO
12A1 SLOT 1 CARD OPTION        STATUS    LATCHIN  (Default = neit
12A2 SLOT 1 CARD OPTION        PULSEOUT  LATCHOUT  (Default = neit
12B SLOT 2 CARD TYPE           NONE      DIGIN     DIGOUT    ANALOGOT  CC
                               (Default = NO
12B1 SLOT 2 CARD OPTION        STATUS    LATCHIN  (Default = neit
12B2 SLOT 2 CARD OPTION        PULSEOUT  LATCHOUT  (Default = neit
12C SLOT 3 CARD TYPE           NONE      DIGIN     DIGOUT    ANALOGOT  CC
                               (Default = NO
12C1 SLOT 3 CARD OPTION        STATUS    LATCHIN  (Default = neit
12C2 SLOT 3 CARD OPTION        PULSEOUT  LATCHOUT  (Default = neit
12D SLOT 4 CARD TYPE           NONE      DIGIN     DIGOUT    ANALOGOT  CC
                               (Default = NO
12D1 SLOT 4 CARD OPTION        STATUS    LATCHIN  (Default = neit
12D2 SLOT 4 CARD OPTION        PULSEOUT  LATCHOUT  (Default = neit
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.9 MC Box Data Point (Box/Slot) Configuration Form *SW88-538*

Table 2-9 contains instructions for Configuration Form *SW88-538*.

Table 2-9 — Instructions for MC Box Data Point Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG MC BOX POINT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN node configuration.*
2	BOX NUMBER (BOXNUM)	Enter a number from 1 to 63 (box number 4 is reserved for the Operator Station.) (Default = 0)	Defines the box address of this MC box on the selected Data Hiway. If a box address of less than 32 is entered, fill out Lines 4 through 8. If the box address of 32 or greater is entered, skip Lines 4 through 8 and go to Line 9.
3	BOX TYPE (BOXTYPE)	Enter MC	Defines this box as being the Multifunction Controller.
4 **	BOX ASSIGNMENT (BOXASSN)	Circle one: THISHG REMOTEHG H4500 ADDEDHG (Default = THISHG)	Defines the function relative to this MC of <u>each</u> HG on the same physical Data Hiway. Refer to Table 3-25 and to heading 2.1.3. If AddedHG is entered, configuration is complete.
5 **	LOAD DESTINATION (LOADDEST)	Circle one: HG HG_HIWAY (Default = HG)	If ThisHG was entered on line 4 and HG HIWAY is entered on line 5, fill in the rest of this form, including lines 15–16Q. Otherwise, fill in the rest of this form, as applicable, except for lines 15–16Q.

(Continued)

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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MC BOX DATA POINT CONFIGURATION FORM
(Continued)

```
HG MC BOX POINT DISPLA
12E SLOT 5 CARD TYPE          NONE      DIGIN     DIGOUT    ANALOGOT  CO
                              (Default = NO
12E1 SLOT 5 CARD OPTION       STATUS    LATCHIN  (Default = nei
12E2 SLOT 5 CARD OPTION       PULSEOUT  LATCHOUT  (Default = nei
12F SLOT 6 CARD TYPE          NONE      DIGIN     DIGOUT    ANALOGOT  CO
                              (Default = NO
12F1 SLOT 6 CARD OPTION       STATUS    LATCHIN  (Default = nei
12F2 SLOT 6 CARD OPTION       PULSEOUT  LATCHOUT  (Default = nei
12G SLOT 7 CARD TYPE          NONE      DIGIN     DI(
                              ANALOGIN  ANALOGOT  COUNTER  (Default =
12G1 SLOT 7 CARD OPTION       STATUS    LATCHIN  (Default = nei
12G2 SLOT 7 CARD OPTION       PULSEOUT  LATCHOUT  (Default = nei
12H SLOT 8 CARD TYPE          NONE      DIGIN     DI(
                              ANALOGIN  ANALOGOT  COUNTER  (Default =
12H1 SLOT 8 CARD OPTION       STATUS    LATCHIN  (Default = nei
12H2 SLOT 8 CARD OPTION       PULSEOUT  LATCHOUT  (Default = nei
12J SLOT 9 CARD TYPE          NONE      DIGIN     DIGOUT    ANALOGOT  CO
                              (Default = NO
12J1 SLOT 9 CARD OPTION       STATUS    LATCHIN  (Default = nei
12J2 SLOT 9 CARD OPTION       PULSEOUT  LATCHOUT  (Default = nei
12K SLOT 10 CARD TYPE         NONE      DIGIN     DIGOUT    ANALOGOT  CO
                              (Default = NO
12K1 SLOT 10 CARD OPTION      STATUS    LATCHIN  (Default = nei
12K2 SLOT 10 CARD OPTION      PULSEOUT  LATCHOUT  (Default = nei
12L SLOT 11 CARD TYPE         NONE      DIGIN     DIGOUT    ANALOGOT  CO
                              (Default = NO
12L1 SLOT 11 CARD OPTION      STATUS    LATCHIN  (Default = nei
12L2 SLOT 11 CARD OPTION      PULSEOUT  LATCHOUT  (Default = nei
12M SLOT 12 CARD TYPE         NONE      DIGIN     DIGOUT    ANALOGOT  CO
                              (Default = NO
12M1 SLOT 12 CARD OPTION      STATUS    LATCHIN  (Default = nei
12M2 SLOT 12 CARD OPTION      PULSEOUT  LATCHOUT  (Default = nei
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-9 — Instructions for MC Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG MC BOX POINT DISPLAY	
6	MC REVISION CODE (MCREV)	Circle one: REV20 REV30 REV 31 (Default = REV 30)	REV20—No UAC in MC. REV30—With UAC in MC. REV31—With Normal Mode handling
7	BOX TRENDING (BOXTREND)	Circle one: NOTREND TREND (Default = NOTREND)	NOTREND—MC box does not have trend option. TREND—MC box has trend option.
8	ADDITIONAL SOPL MEMORY (SOPLMEM)	Circle one: NOSOPL SOPL (Default = NOSOPL)	Indicates that additional SOPL memory is in this box. Make an entry in this line only if a) REV 20 is entered in Line 6 and NOTREND is entered in Line 7, or b.REV30 or REV31 is tered in line 6.
9	C-LINK NUMBER (BOXCLINK)	Enter a number from 1 to 8 (Default = 1)	Defines the C-Link number to which this MC is connected.
10	ADDRESS NUMBER ON C-LINK (CLINKNUM)	Enter a number from 1 to 8 (Default = 1)	Defines the box address number on the C-Link.
11	LIBRARY (LIBRYNUM)	Enter a number from 1 to 4 (Default = 1)	Defines HG library that is used by this MC. Refer to instructions for HG Library Configuration Form.
12	NUMBER OF I/O FILES (NMBRBCFL)	Enter 0, 1, or 2 (Default = 0)	Defines the number of I/O files that are attached to this MC box as follows: Entry Description 0 No I/O files 1 One I/O file (8 slots) 2 Two I/O files (16 slots)

(Continued)

MC BOX DATA POINT CONFIGURATION FORM
(Continued)

```
HG MC BOX POINT DISPLAY (CONTINUE

12N SLOT 13 CARD TYPE        NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12N1 SLOT 13 CARD OPTION     STATUS    LATCHIN  (Default = nei
12N2 SLOT 13 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
12P SLOT 14 CARD TYPE        NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12P1 SLOT 14 CARD OPTION     STATUS    LATCHIN  (Default = nei
12P2 SLOT 14 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
12Q  SLOT 15 CARD TYPE       NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12Q1 SLOT 15 CARD OPTION     STATUS    LATCHIN  (Default = nei
12Q2 SLOT 15 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
12R SLOT 16 CARD TYPE        NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12R1 SLOT 16 CARD OPTION     STATUS    LATCHIN  (Default = nei
12R2 SLOT 16 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
13  CHANGE DETECTION         NOTCONFG  DETECT    SET  (Default = NOTC
      (CHNGFLAG
14  EVENT PROCESSING         DISABLE   ENABLE  (Default = DIS
      (EVENTPRC

15  TOG INTERVAL 1          |___|___|___|___|     (Default = 0 seconds
***   (BOXTOG1
16  TOG INTERVAL 2          |___|___|___|___|     (Default = 0 seconds
***   (BOXTOG2
16A SLOT 1 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
      (TOGINTSL

16B SLOT 2 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16C SLOT 3 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16D SLOT 4 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16E SLOT 5 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16F SLOT 6 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16H SLOT 7 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16I SLOT 8 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-9 — Instructions for MC Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG MC BOX POINT DISPLAY	
12A– 12H See NOTE)	SLOT 1–8 CARD TYPE (PIUCRDTY)	Circle one: NONE DIGIN DIGOUT COUNTER ANALOGOT ANALOGIN (Default = NONE)	If no I/O files are to be configured skip Lines 12A–12R2 (SLOT CARD TYPE and SLOT CARD OPTION) for slots 1–16 and go to Line 13. If one I/O file is to be configured, fill out the SLOT CARD TYPE and SLOT CARD OPTION Lines for slots 1–8 (Lines 12A–12H2). If two I/O files are to be configured, fill out the SLOT CARD TYPE and SLOT CARD OPTION Lines for slots 1–16 (Lines 12A–12R2). Defines a card type for each of the 8 slots (slots 1–8) in I/O File 1 If NONE, COUNTER, ANALOGOT, or ANALOGIN is entered for a particular slot, skip the SLOT CARD OPTION lines for the slot and go on to the next SLOT CARD TYPE line form the next slot. (The ANALOGIN card type can be specified for only slots 7 and 8.)

(Continued)

NOTE

In the following instructions, similar entries are grouped to avoid cumbersome repetition. The line numbers of instructions and form entries correspond to each other, but are not shown on facing pages.

MC BOX DATA POINT CONFIGURATION FORM
(Continued)

```
HG MC BOX POINT DISPLAY (CONTINUE

12N SLOT 13 CARD TYPE        NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12N1 SLOT 13 CARD OPTION     STATUS    LATCHIN  (Default = nei
12N2 SLOT 13 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
12P SLOT 14 CARD TYPE        NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12P1 SLOT 14 CARD OPTION     STATUS    LATCHIN  (Default = nei
12P2 SLOT 14 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
12Q  SLOT 15 CARD TYPE       NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12Q1 SLOT 15 CARD OPTION     STATUS    LATCHIN  (Default = nei
12Q2 SLOT 15 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
12R SLOT 16 CARD TYPE        NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12R1 SLOT 16 CARD OPTION     STATUS    LATCHIN  (Default = nei
12R2 SLOT 16 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
13  CHANGE DETECTION         NOTCONFG  DETECT    SET  (Default = NOTC
      (CHNGFLAG
14  EVENT PROCESSING         DISABLE   ENABLE  (Default = DIS
      (EVENTPRC

15  TOG INTERVAL 1          |__|__|__|__|     (Default = 0 seconds
***   (BOXTOG1
16  TOG INTERVAL 2          |__|__|__|__|     (Default = 0 seconds
***   (BOXTOG2
16A SLOT 1 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
      (TOGINTSL

16B SLOT 2 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16C SLOT 3 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16D SLOT 4 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16E SLOT 5 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16F SLOT 6 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16H SLOT 7 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16I SLOT 8 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-9 — Instructions for MC Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG MC BOX POINT DISPLAY	
			NONE = No card in this slot DIGIN = Digital Input DIGOUT = Digital Output COUNTER = Counter Input ANALOGOT = Analog Output ANALOGIN = Analog Input (Slots 7 & 8 only)
12A1–12H1	SLOT 1–8 CARD OPTION (PIUCRDOP)	If DIGIN has been entered on the SLOT CARD TYPE line, circle one: STATUS LATCHIN (Default = No Options)	STATUS = Status LATCHIN = Change Detect (Latched)
12A2–12H2	SLOT 1–8 CARD OPTION (PIUCRDOP)	If DIGOUT has been entered on the SLOT CARD TYPE line, Circle one: PULSEOUT LATCHOUT (Default = No Options)	PULSEOUT = Pulsed Output LATCHOUT = Latched Output
12J–12R	SLOT 1–16 CARD TYPE (PIUCRDTY)	Circle one: NONE DIGIN DIGOUT COUNTER ANALOGOT (Default = NONE)	Defines the card type for each of the 8 slots (slots 9–16) in I/O File 2. NONE = No card in this slot DIGIN = Digital Input DIGOUT = Digital Output COUNTER = Counter Input ANALOGOT = Analog Output

(Continued)

MC BOX DATA POINT CONFIGURATION FORM
(Continued)

```
HG MC BOX POINT DISPLAY (CONTINUE

12N SLOT 13 CARD TYPE        NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12N1 SLOT 13 CARD OPTION     STATUS    LATCHIN  (Default = nei
12N2 SLOT 13 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
12P SLOT 14 CARD TYPE        NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12P1 SLOT 14 CARD OPTION     STATUS    LATCHIN  (Default = nei
12P2 SLOT 14 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
12Q  SLOT 15 CARD TYPE       NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12Q1 SLOT 15 CARD OPTION     STATUS    LATCHIN  (Default = nei
12Q2 SLOT 15 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
12R SLOT 16 CARD TYPE        NONE      DIGIN     DIGOUT    ANALOGOT  CC
                             (Default = NO
12R1 SLOT 16 CARD OPTION     STATUS    LATCHIN  (Default = nei
12R2 SLOT 16 CARD OPTION     PULSEOUT  LATCHOUT  (Default = nei
13  CHANGE DETECTION         NOTCONFG  DETECT    SET  (Default = NOTC
      (CHNGFLAG
14  EVENT PROCESSING         DISABLE   ENABLE  (Default = DIS
      (EVENTPRC

15  TOG INTERVAL 1          |___|___|___|___|     (Default = 0 seconds
***   (BOXTOG1
16  TOG INTERVAL 2          |___|___|___|___|     (Default = 0 seconds
***   (BOXTOG2
16A SLOT 1 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
      (TOGINTSL

16B SLOT 2 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16C SLOT 3 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16D SLOT 4 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16E SLOT 5 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16F SLOT 6 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16H SLOT 7 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI

16I SLOT 8 TOG INTERVAL      INTERV1   INTERV2  (Default = INTI
```

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-9 — Instructions for MC Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG MC BOX POINT DISPLAY	
12J1–12R1	SLOT 9–16 CARD OPTION (PIUCRDOP)	If DIGIN has been entered on the SLOT CARD TYPE line Circle one: STATUS LATCHIN (Default = No Options)	STATUS = Status LATCHIN = Change Detect (Latched)
12J2–12R2	SLOT 9–16 CARD OPTION (PIUCRDOP)	If DIGOUT has been entered on the SLOT CARD TYPE line Circle one: PULSEOUT LATCHOUT (Default = No Options)	PULSEOUT = Pulsed Output LATCHOUT = Latched Output
13	CHANGE DETECTION (CHNGFLAG)	Circle one: NOTCONFG DETECT SET (Default = NOTCONFG)	Select: –DETECT to enable HG to alert LCN devices such as Universal Stations to changes in MC status that originated in preferred devices on the same Data Hiway or in the the Change Circular list of the MC. –SET to enable LCN device such as a Universal Station to alert preferred devices to changes it makes in an MC on the same Hiway.
14	EVENT PROCESSING (EVENTPRC)	Circle one: DISABLE ENABLE (Default = DISABLE)	Select ENABLE if process alarms, process changes, and operator messages are to be routed through this HG to an LCN.

(Continued)

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MC BOX DATA POINT CONFIGURATION FORM
(Continued)

HG MC BOX POINT DISPLAY (CONTINUE

16J SLOT 9 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
16K SLOT 10 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
16L SLOT 11 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
16M SLOT 12 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
16N SLOT 13 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
16O SLOT 14 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
16P SLOT 15 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
16Q SLOT 16 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17A IO SLOT 1 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17B IO SLOT 2 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17C IO SLOT 3 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17D IO SLOT 4 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17E IO SLOT 5 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17F IO SLOT 6 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17G IO SLOT 7 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17H IO SLOT 8 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17I IO SLOT 9 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17J IO SLOT 10 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17K IO SLOT 11 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17L IO SLOT 12 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17M IO SLOT 13 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17N IO SLOT 14 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17O IO SLOT 15 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17P IO SLOT 16 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI
17Q IO SLOT 17 TOG INTERVAL	INTERV1	INTERV2	(Default = INTI

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-9 — Instructions for MC Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
		HG MC BOX POINT DISPLAY	
15 *** 16 *** (See Note)	TOG INTERVAL 1 (BOXTOG1) TOG INTERVAL 2 (BOXTOG2)	Enter 0 to 9999 seconds 0 = Never shed (Default = 0 seconds)	Time-Out-Gate (TOG) intervals 1 & 2 enable selection of either of two time-out intervals for each for each slot in this MC box. The time-out interval is the time between two successive transmissions from a supervisory controller to a particular slot in this box. If a time-out interval is exceeded, the respective slot is automati - cally placed in the manual mode.
16A–16Q	SLOT 1–16 TOG INTERVAL (TOGINTSL)	Circle one: INTERV1 INTERV2 (Default = INTERV1)	Specifies whether TOG INTERVAL 1 (INTERV1) or TOG INTERVAL 2 (INTERV2) entered on Lines 15 and 16 is to be the time-out gate interval for the particular slot.
17A-17Q	IO slot 1-16 TOG INTERVAL	circle one: INTERV 1 INTERV 2 (Default = INTERV1)	Specifies whether TOG Interval 1 (INTERV1) or TOG Interval 2 (INTERV2) entered on lines 15 and 16 is to be the timeout gate interval for the particular IO slot.

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AU, GPCI, H4500 & RCD BOX DATA POINT CONFIGURATION FORM

HG BOX DATA POINT DISPL/

1	HIWAY NUMBEI (HWYNUM)	└__┘└__┘	(Default = 1		
2	BOX NUMBEF (BOXNUM)	└__┘└__┘	(Default = 0		
3	BOX TYPE (BOXTYPE)	CB LEPIU MC H4500	AU CBRCD MCRCD HG	HLPIU EC DHP GPCI	LLPIU ECRCD OPSTA NOTCONFG
3A	BOX ASSIGNMEN (BOXASSN)	THISHG	REMOTEHG	ADDEDHG	4500

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

2.1.4.10 AU, GPCI, H4500, & RCD Box Data Point (Box/Slot) Configuration Form *SW88-539*

This form can be used to configure the box data point for an AU, GPCI, H4500, or RCD. It can also be used to delete a box data point. To delete a box data point, make entries in lines 1 and 2 as required, and then enter NOTCONFG for line 3.

Table 2-10 contains instructions for Configuration Form *SW88-539*.

Table 2-10 — Instructions for Box Data Point Configuration Form

LINE	NAME	FORM ENTRY	REMARKS
		HG BOX DATA POINT DISPLAY	
1	HIWAY NUMBER (HWYNUM)	Enter a number from 1 to 20 (Default = 1)	Hiway Number assignments to HGs are made in LCN node configuration.*
2	BOX NUMBER (BOXNUM)	Enter a number from 1 to 63. (Box number 4 is reserved for the Operator Station) (Default = 1)	Defines the box address of this box on the selected Data Hiway. If no Operator Station is on this hiway, box number 4 can be assigned to another box.
3	BOX TYPE (BOXTYPE)	Circle one: CB AU HLPIU LLPIU LEPIU CBRCD EC ECRCD MC MCRCD DHP OPSTA H4500 HG GPCI NOTCONFG	Valid entries for this line are the following: AU = Analog Unit MCRCD = Multifunction Controller Reserve Controller Director CBRCD = Basic Controller Reserve Controller Director ECRCD = Extended Controller Reserve Controller Director

(Continued)

*Refer to Network Form SW88-509, Hiway Gateway Node Display

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AU, GPCI, H4500 & RCD BOX DATA POINT CONFIGURATION FORM

HG BOX DATA POINT DISPL/

1	HIWAY NUMBEI (HWYNUM)	⌊__⌋⌊__⌋	(Default = 1		
2	BOX NUMBEF (BOXNUM)	⌊__⌋⌊__⌋	(Default = 0		
3	BOX TYPE (BOXTYPE)	CB	AU	HLPIU	LLPIU
		LEPIU	CBRCD	EC	ECRCD
		MC	MCRCD	DHP	OPSTA
		H4500	HG	GPCI	NOTCONFG
3A	BOX ASSIGNMEN (BOXASSN)	THISHG	REMOTEHG	ADDEDHG	4500

References: Data Hiway Box/Slot, and Data Point Form Inst. in the Impl./Startup & Reconfig. binder.
Data Entity Builder in the Implementation/Engineering Operations-1 binder.

Table 2-10 — Instructions for Box Data Point Configuration Form (Continued)

LINE	NAME	FORM ENTRY	REMARKS
			OPSTA = Basic or Enhanced Operator Station H4500 = Honeywell 4500 Computer GPCI = General Purpose Computer Interface If CBRCD, ECRCD, or MCRCD is entered for this line, also fill out line 3A.
3A	BOX ASSIGNMENT (BOXASSN)	Circle one: THISHG REMOTEHG ADDEDHG H4500 (Default= THISHG)	Identifies which preferred access device is primarily responsible for operation of the type of box selected in line 3 (refer to Table 2-2 and to Section 2.1.3).

DATA POINT FORMS
Section 3

General instructions are provided in this section to fill out the Hiway Gateway Data-Point forms. You must also refer to the *HG Parameter Reference Dictionary* in the *Implementation/Hiway Gateway - 1* binder where detailed information about each Data-Point parameter is provided. The HG Data-Point Forms are located in the *Implementation/ Configuration Forms* binder.

3.1 FORM TYPES

Forms are provided for each type of HG process data-point as follows:

Box Type	Process Data-Point Type
Basic Controller (CB)	Remote Variable (RV) Regulatory
Data Hiway Port (DHP) and IPCD 620 Hiway Interface Module (620 HIM)	Analog Composite Analog Input Analog Output Digital Composite Digital Input Digital Output Counter
Extended Controller (EC)	Digital Input Regulatory
Hiway Gateway (HG)	Batch Assign
Highway Gateway Library Forms are located in the *Implementation/Configuration Forms* binder.	
High-Level Process Interface Unit (HLPIU)	Analog Composite Analog Input Analog Output Digital Composite Digital Input Digital Output Counter (16-Bit) Counter (32-Bit)
Low-Energy Process Interface Unit (LEPIU)	Analog Input
Low-Level Process Interface Unit (LLPIU)	Analog Input

(Data-Point Forms, Continued)

Multifunction Controller (MC)	Analog Composite Analog Input Analog Input with Accum. Analog Output Digital Composite Digital Input Digital Output Counter (16-Bit) Process Module Regulatory Flag Numeric Timer Logic Block

3.2 GENERAL INSTRUCTIONS

3.2.1 Line Numbers

The Data-Point forms have also been designed so that the lines on them correspond with the Parameter Entry Displays (PEDs) at the Universal Station.

The line numbers may contain an alphabetic suffix letter as shown in Figure 3-1. An alphabetic suffix indicates that the line may be exposed or suppressed on the PED, depending on the selection made in a previous line.

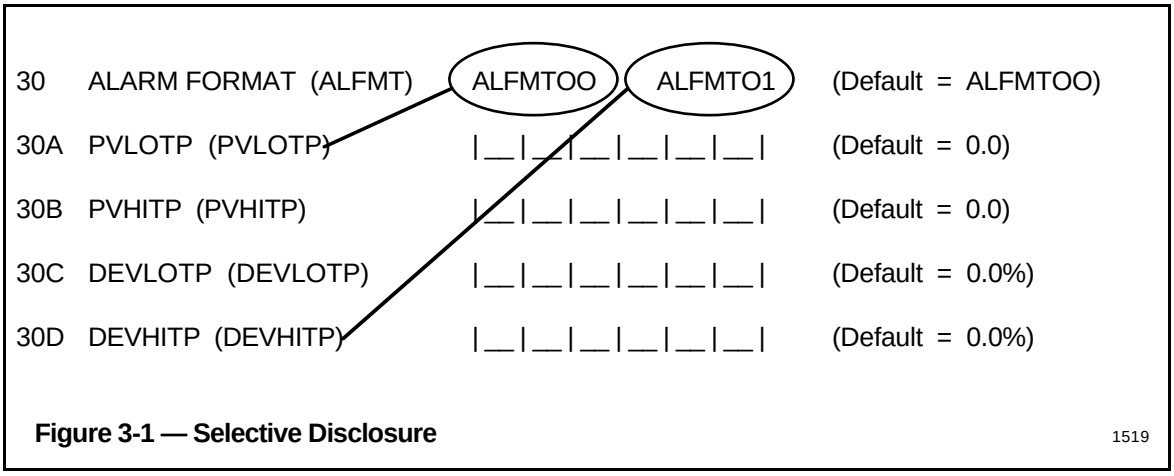

Figure 3-1 — Selective Disclosure 1519

In the example shown in Figure 3-1, selecting ALFMT00 in Line 30 causes Lines 30A and 30B to be disclosed on the PED, while Lines 30C and 30D are suppressed and are not shown. Conversely, selecting ALFMT01 in Line 30 causes Lines 30C and 30D to be exposed, while Lines 30A and 30B are suppressed. To determine which lines have to be filled in, refer to the definition of the ALFMT parameter in the *Hiway Gateway Parameter Reference Dictionary*, in the *Implementation/Hiway Gateway - 1* binder.

3.2.1.1 Regulatory Data Points

For regulatory data-point forms, an asterisk suffix for a line number indicates that the line may or may not have to be filled in by the user, depending on the algorithm selected for the regulatory data point. As shown in Figure 3-2, algorithm selection is accomplished at the ALGIDDAC parameter on the form, which provides the user with a choice of algorithms that are applicable to the respective highway box. For example, if Logic was selected as the algorithm for an Extended Controller (EC) Regulatory Data Point, the user would look up the definition of "Logic" in the *Hiway Gateway Parameter Reference Dictionary,* to determine which of the lines (parameters) have to be filled in on the form. In this example, the user would not fill in Lines 41 and 48 because the CTLACTN and PVTRACK parameters do not appear in the listing.

3.2.1.2 Extended Controller Regulatory Form

In addition, the EC Regulatory Form requires the user to write in the parameter name and value (or selection) for Lines 73 through 94, using the same technique as described in the previous paragraph except that the parameter names are taken from the parameter listing in the dictionary. The CB and MC Regulatory Forms do not require the user to write in the parameter names.

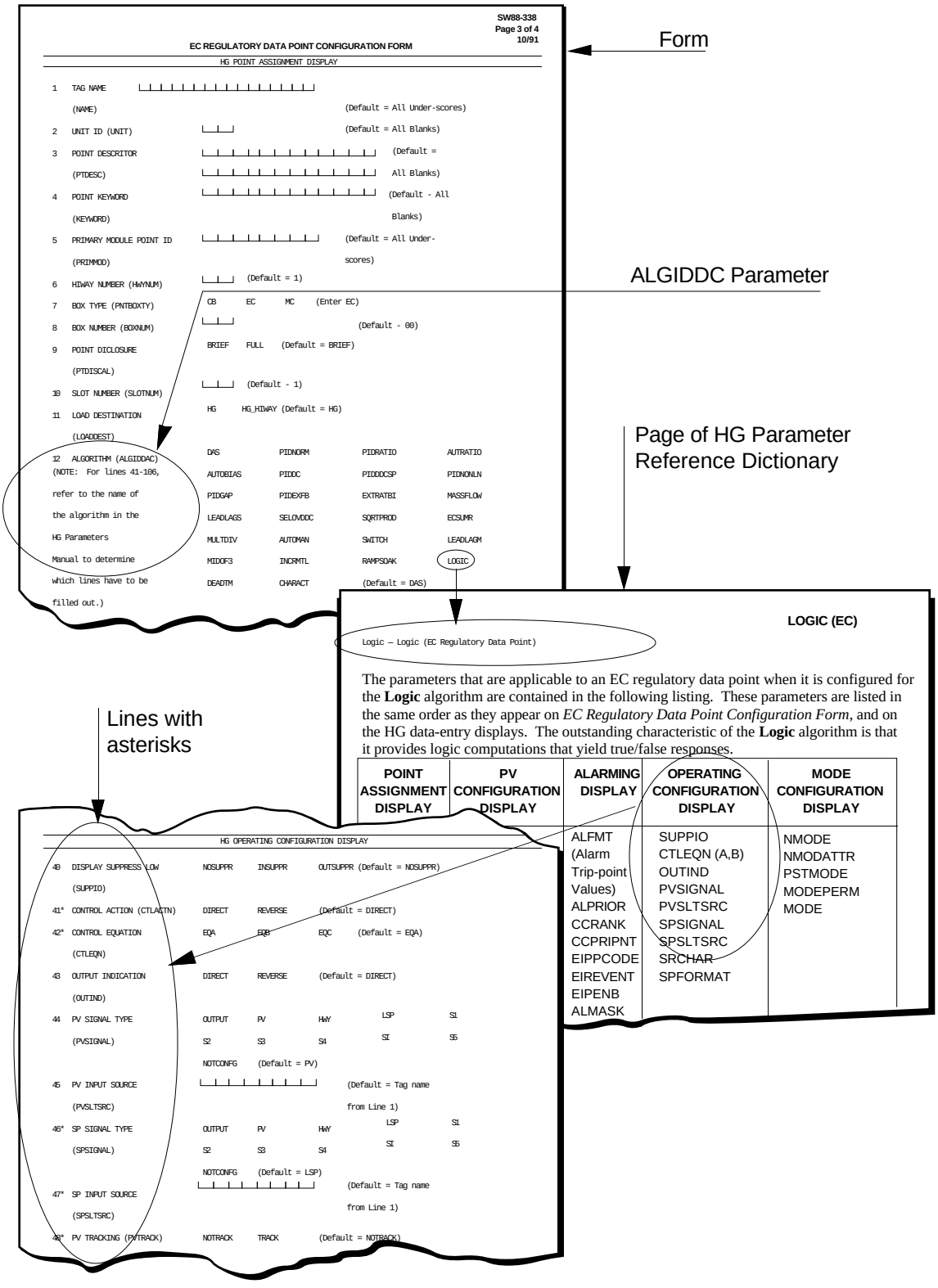

Figure 3-2 — Determining Lines to be Filled in for a Regulatory Form 1520

3.2.2 Form Entries

There are two types of entries that you can make on the configuration forms as shown in Figure 3-3. Some parameters require that you write in a numeric value or alphanumeric character string in the spaces provided on the form. Other parameters require that you make a selection from the complete range of possible selections for the parameter, as if in a menu. To make a selection from this menu of choices, you can use a pencil or pen to circle the selection.

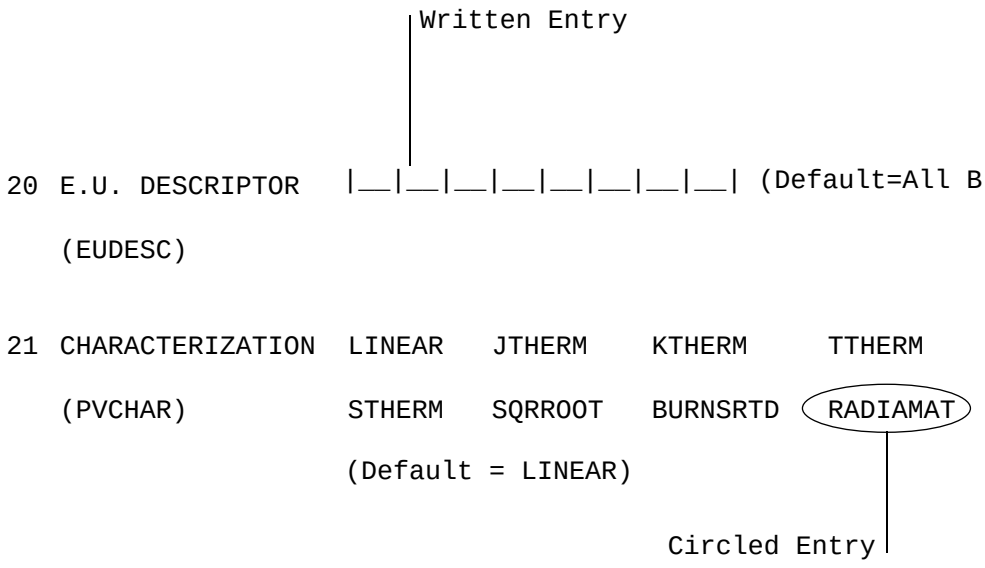

Figure 3-3 — User Entries 1521

NOTE

Selecting Brief as the entry for the POINT DISCLOSURE (PTDISCL) parameter instead of Full, causes default values to be entered for those parameters not displayed by the DEB, and these values cannot be changed. Therefore, always select Full for the PTDISCL parameter for those data points where you decide to change the default value at a later time.

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